NEW MARKET VISTAS FOR IRON OXIDES

Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

June 13, 1960

OPD SPECIAL 'DEPTH' REPORT
PAGE THREE

RECEIVED JUN 13 1960
THE CHEMISTS' CLUB LIBRARY

For PURITY UNIFORMITY

"AA QUALITY"

CONTROLLED CHEMICALS

Tested from raw material to finished product, you can count on AA Quality Controlled Chemicals always—to give you highest possible quality and uniformity. Write today for further information and Free samples. Backed by over 85 years of experience.

THE AMERICAN AGRICULTURAL CHEMICAL COMPANY · AA QUALITY

TRISODIUM, DISODIUM PHOSPHATE, Anhydrous & Crystalline
TETRASODIUM PYROPHOSPHATE
SODIUM TRIPOLYPHOSPHATE
PHOSPHORIC ACID 75% Food Grade
PHOSPHORIC ACID 85% N. F. Grade
PHOSPHORUS PENTASULPHIDE
PHOSPHORUS SESQUISULPHIDE
PHOSPHORUS RED AMORPHOUS
AMMONIUM, MAGNESIUM, SODIUM & ZINC SILICOFLUORIDE
SODIUM FLUORIDE • POTASSIUM SILICOFLUORIDE
PHOS-FEED® BRAND DICALCIUM PHOSPHATE

Phone or Write Chemical Sales Division

The AMERICAN AGRICULTURAL CHEMICAL Co.
100 Church Street, New York 7, N. Y. • BArclay 7-1400
P.O. Drawer 2458, Detroit 31, Mich. • Vinewood 2-0146

Pennsalt

n-BUTYLAMINES

BUTYLAMINE • DIBUTYLAMINE • TRIBUTYLAMINE

Industrial Chemicals Division
PENNSALT CHEMICALS CORPORATION
3 Penn Center, Philadelphia 2, Pa.

Pennsalt Chemicals
ESTABLISHED 1850

Baker

POTASSIUM CHLORIDE

Reagent Crystal

U. S. P. Crystal and Granular

Baker

J. T. BAKER CHEMICAL CO.
PHILLIPSBURG, N. J.
New York • Chicago • Philadelphia • Los Angeles

Salt Cake

PRIOR CHEMICAL CORPORATION
420 LEXINGTON AVENUE
NEW YORK 17, N. Y.

CABLE: PRIORCHEM NEW YORK
PHONE: LExington 2-9811

INDUSTRIAL and PHARMACEUTICAL CHEMICALS

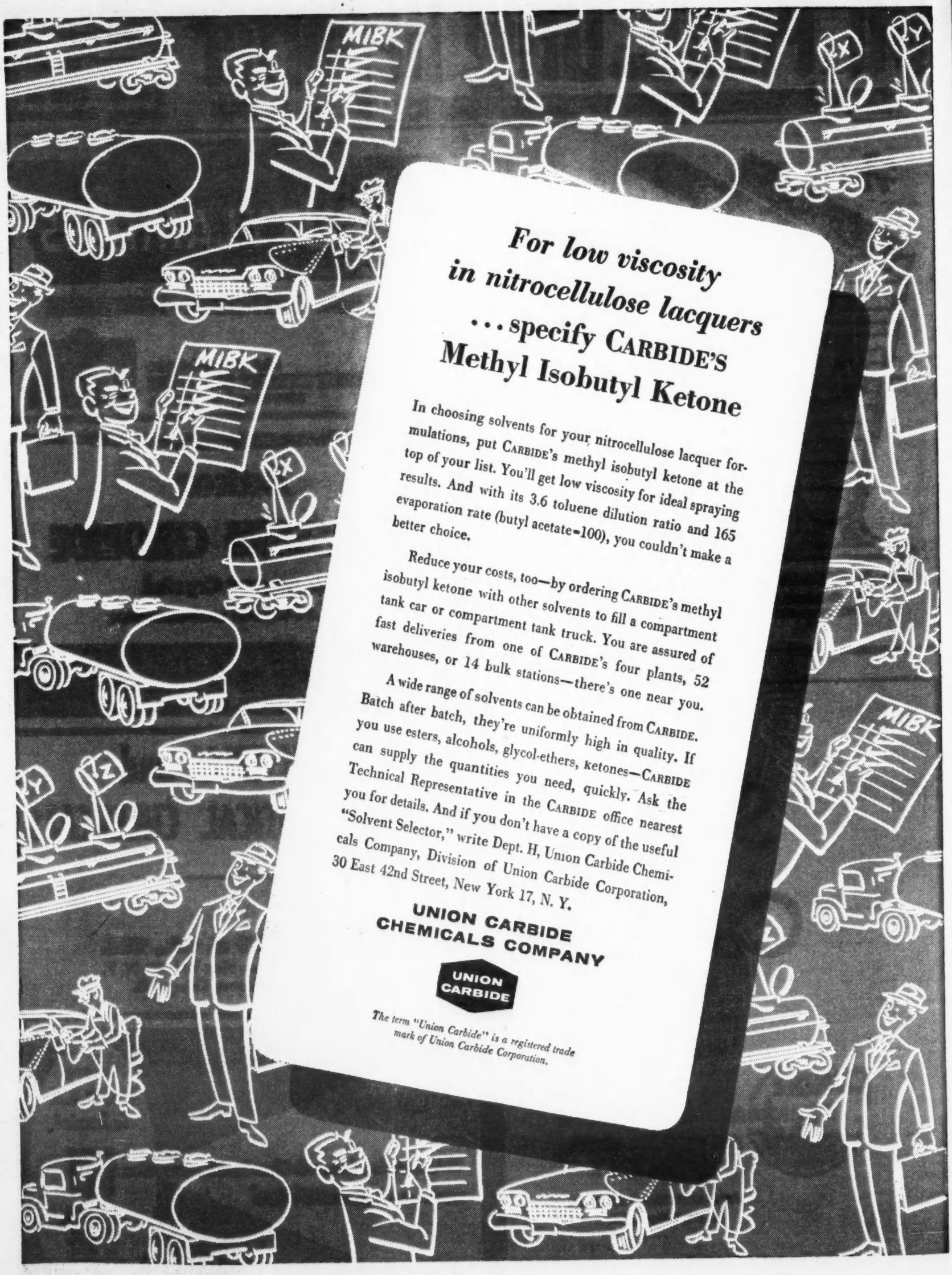
R.W. GREEFF & CO., INC.
10 Rockefeller Plaza, New York 20, N. Y.
1721 Tribune Tower, Chicago, Ill.

where BORAX is basic!

United States Borax & Chemical Corporation

USB

NEW YORK
LOS ANGELES
CHICAGO
CLEVELAND
ST. LOUIS
PHILADELPHIA
ATLANTA


MIBK
MIBK
MIBK
For low viscosity in nitrocellulose lacquers ...specify CARBIDE'S Methyl Isobutyl Ketone
In choosing solvents for your nitrocellulose lacquer formulations, put CARBIDE's methyl isobutyl ketone at the top of your list. You'll get low viscosity for ideal spraying results. And with its 3.6 toluene dilution ratio and 165 evaporation rate (butyl acetate=100), you couldn't make a better choice.
Reduce your costs, too—by ordering CARBIDE's methyl isobutyl ketone with other solvents to fill a compartment tank car or compartment tank truck. You are assured of fast deliveries from one of CARBIDE's four plants, 52 warehouses, or 14 bulk stations—there's one near you.
A wide range of solvents can be obtained from CARBIDE. Batch after batch, they're uniformly high in quality. If you use esters, alcohols, glycol-ethers, ketones—CARBIDE can supply the quantities you need, quickly. Ask the Technical Representative in the CARBIDE office nearest you for details. And if you don't have a copy of the useful "Solvent Selector," write Dept. H, Union Carbide Chemicals Company, Division of Union Carbide Corporation, 30 East 42nd Street, New York 17, N. Y.
UNION CARBIDE CHEMICALS COMPANY
UNION CARBIDE
The term "Union Carbide" is a registered trade mark of Union Carbide Corporation.

RECEIVED
JUN 13 1960
THE CHEMISTS' CLUB
LIBRARY

Oil, Paint and Drug Reporter

Vol. 177 No. 25 30 Church St., New York 7, N. Y. June 13, 1960

CRUDE IRON OXIDE MINES
53,000 Tons Were Produced in '59

Producer	Location
American Pigment Corporation . . .	Hiwassee, Va.
Cleveland-Cliffs Iron Company . . .	Marquette Co., Mich.
Clinton Metallic Paint Company . .	Clinton, N. Y.
William DeSalve	Elk Co., Pa.
M. A. Hanna Company	Mesabe Range, Minn.
Lanzendorfer Trucking Company . .	Cambria Co., Pa.
New Riverside Ochre Company . . .	Bartow Co., Ga.
Orr Engineering Company	Scappoose, Ore.
Pickands Mather & Co.	Mesabe Range, Minn.
C. K. Williams & Co.	San Miguel Co., Colo.

Iron Oxide Picture Is Seen Brighter Than Ever This Year As Pigments, Ferrites Surge

Sales of iron oxide pigments reached an all-time high of 117,000 tons in 1959 and could jump as high as 128,000 tons this year. Even the most conservative members of the industry believe sales will reach at least 120,000 tons in 1960. What happened to iron oxides to bring them into the pigment spotlight? Sales climbed 20 percent last year over a rusty 98,422 tons in 1958. Responsible factors in the upsurge include record sales of $1.8 billion by the paint industry last year ($1.6 billion the year previous), as well as a rebound by the economy in general.

OPD 'Depth' Report

Despite a spectacular showing in the pigment market, it is in the unreported and not-too-highly publicized realm of non-pigment uses that the most glamorous prospects appear.

The Role of Ferrites

The most lucrative and promising field for iron oxides now is in ferrites. These are magnetic compounds having in general a spinel (eight-sided) structure, and can be used wherever high frequencies are involved.

This means that synthetic iron oxides combined with other materials such as zinc, manganese and barium are finding applications because of their unique properties in electronic tapes, television tube deflection yokes, permanent magnets, memory frames for computers and microwave (e.g. radar) use.

Ferrites are split off most generally into four groups: "soft" magnetic ferrites, "hard" or permanent magnetic ferrites, ferrites for the storage of information and ferrites for gyromagnetic effects.

"Soft" applications include such electronic uses as TV deflection yokes, transformer cores, tuning slugs, antenna material and other equipment where the iron oxide ferrite is magnetized by exposing it to an external field, but lapses spontaneously when the external field is removed.

There were some 6.5 million TV picture tubes put into as many sets in 1959. One source points out that each set contains about two pounds of synthetic iron oxide. Market: 13 million pounds of iron oxide.

A word of caution about the synthetic ferrite-type oxides, however: Production figures are not reported to the Bureau of Mines as are figures for iron oxide pigments.

Producers of these special materials—Minnesota Mining & Manufacturing Com-

—Continued on page 58

IRON OXIDE SALES

1960	*120,000 tons
1959	*117,000 tons
1958	98,422 tons
1957	104,865 tons
1956	113,861 tons
1955	115,302 tons
1954	97,951 tons
1953	108,350 tons
1952	105,242 tons

*Industry Estimate
Source: Tariff Commission

Drug Law Tightening Seems Sure To Be an Echo of Kefauver Hearings

The drug industry has its work already cut out for next year, when the new congress goes into session in January. As a result of the Kefauver anti-monopoly committee investigations, manufacturers can look for a series of major legislative proposals, most likely with bipartisan support. They will be aimed at putting new teeth into the food, drug and cosmetic law and at tightening the reins of the Food & Drug Administration over both the manufacture and distribution of drugs.

This became almost a certainty last week as the Kefauver committee rang down the curtain on the present series of hearings and went into recess until sometime later in the year when it will resume its probing of the pricing practices of the industry.

August Hearings on Antibiotics Likely

The most probable date is next August and the subject: antibiotics.

The heart of the legislative program expected to be recommended by the Kefauver committee will be two of the proposals recommended last fortnight (OPD, 6/6/60) by Secretary of Health, Education & Welfare Arthur S. Flemming: a requirement that no drug be marketed unless it has been tested for "efficacy" as well as safety, and extension of the antibiotic certification system to cover all drugs in this area.

Persons in the drug industry who have spent the last twenty-five years keeping in touch with the FDA's activities will be quick to recognize these proposals as recommendations which have long been favored by FDA.

One of the big controversies in the drafting of the present pure food and drug law in the late thirties centered on the question of the government passing on the curative values of a drug. Industry was able to beat back demands on this score.

The proposal for broadening the antibiotic certification system, now limited to penicillin, streptomycin, tetracycline,

—Continued on page 47

DEVELOPMENT DIRECTOR: R. G. Richards, appointed to the newly-established post of director of development by Diamond Alkali Company, Cleveland, Ohio.

Polypropylene May Tie Hercules and Beaunit

Polypropylene fiber, aside from its other uses, may yet be a material that will weave together two of the nation's great industrial concerns: Hercules Powder Company, the big chemical producer in Wilmington, Del., and Beaunit Mills, Inc., New York-based maker of yarns and knit fabrics.

Officials of both companies have been talking merger. Their organizations have a mutual interest in synthetic fibers spun from polypropylene.

Some three months ago Beaunit announced that it was planning to make polypropylene fibers and said that next February would be its target date.

Hercules is a big-time supplier of poly-

—Continued on page 36

PHS Still Won't Approve Live Polio Vaccine Sale

In spite of success claims made for live polio vaccine, the Public Health Service is still not ready to release the material for general sales purposes.

Dr. Leroy E. Burney, Surgeon General of PHS, said last week that the service's technical experts and its scientific advisers "are not convinced that all of the technical problems have been fully resolved."

Ashland Naphthalene Unit Contract Given to Badger

Ashland Oil & Refining Company, Ashland, Ky., has awarded a contract to Badger Manufacturing Company, Bainbridge, Mass., for the erection of a hydrodealkylation unit at the company's No. 1 refinery at Catlettsburg, Ky.

The plant has been designed to produce 75 million pounds a year of naphthalene and 15 million gallons a year of benzene.

The plant is the first to produce synthetically high-grade naphthalene and nitration grade benzene from petroleum by hydrodealkylation.

Badger expects the new installation to be complete next February.

Hooker Phenol Plant Will Rise in Kentucky

Hooker Chemical Corporation's board has given the "green light" to a long-rumored project: a new synthetic phenol plant in northern Kentucky. Construction will start later this year, with completion slated for the end of 1961.

Though the Niagara Falls, N.Y., company is reluctant to divulge the size of the new installation, the trade pegs its capacity at around 50 million pounds of phenol a year. Hooker's phenol plant at North Tonawanda, N.Y., is rated at about 65 million pounds a year.

The concern has optioned a 165-acre site for its new multi-million-dollar project three miles west of South Shore, Ky., on the Ohio River—about five miles upstream from Portsmouth, Ky.

This would put Hooker's new phenol unit right next door to the $5 million frac-

—Continued on page 53

ASS'T DEVELOPMENT CHIEF: Dr. Nolan B. Sommer, elevated from manager of the explosives and mining chemicals department to assistant general manager of its commercial development division by American Cyanamid Company, New York.

Casein Duty Suspension Gets Some More Backing

Senate and house conferees on the casein bill, HR 9862, have just agreed to recommend continued suspension of the import duties on casein for another three years.

But they have decided to modify the so-called Hartke amendment on edible casein to make it more workable.

When passed by the senate several weeks ago (OPD, 5/16/60), an amendment was made to the bill limiting the suspension of the duty to casein classed as inedible. Edible casein would continue to pay the regular tariff of 2¾ cents a pound.

As reported back by the conference committee last week, references to edible casein are eliminated from the bill and the term "caseinate" is substituted, thus making this specific material subject to the tariff.

It was explained that caseinate is the edible form of casein and that this is the particular material that the domestic soybean interests are concerned with, since it competes with domestic soya protein.

By making the bill apply to caseinates rather than to edible casein the law will be easier to administer by the Customs Bureau.

There is nothing in the amendment, however, that will prevent the conversion of imported casein into edible casein or caseinate after it is imported—without the payment of duties.

Chemical Expansion Forecast: Good Growing Weather Is Ahead

The chemicals industry is continuing to view the future in an optimistic light. Expenditures for new plants and equipment for the third quarter of this year have again been scheduled at a high level, firming up the prospects that total new capital investments for the year will be in the neighborhood of $1.6 billion. That sum would be almost equal to the record high of $1.7 billion recorded in 1957.

Quarterly figures, prepared by the Department of Commerce and the Securities & Exchange Commission from surveys conducted last month, reveal chemical industry intentions to spend about $390 million on new plants and equipment in the third quarter.

Drop of $20 Million

This is only $20 million less than in the second quarter and $80 million more than in the third quarter of last year.

On the basis of present indications, government economists expect the industry to invest about $1.59 billion in new capital improvements this year, as compared with $1.23 billion last year and $1.32 billion in 1958.

Petroleum and coal products industries are also stepping up their capital investments to $2.64 billion this year, from a levels of $2.49 billion last year, while paper and allied products expect to spend $750 million this year against $630 million last year.

Capital expenditures of the rubber products industry are scheduled at $260 million against $190 million last year.

The two government agencies report that capital outlays for plant and equipment for all industry were at a seasonally adjusted annual rate of $35 billion in the first quarter of this year, and are programmed to rise to $37.5 billion in the third quarter. This is $500 million more than scheduled in the second quarter.

Manufacturing industries, railroads, public utilities and commercial companies all expect investment, seasonally adjusted, to rise through the third quarter of this year.

Mining and non-rail transportation enterprises indicate increases for the second quarter, and then a leveling-off in their capital outlays.

o-Dichlorobenzene Time For Shipping Cut in Half

It took less than two days for Monsanto Chemical Company to ship a 3,000-gallon order of ortho-dichlorobenzene from its name-sake city in Illinois to the New York area.

This was less than half the time such a shipment usually takes, and further, the St. Louis, Mo., company claims to have eliminated all costs of handling, storage and inventory.

The material went by "piggy back," meaning shipment of a tank trailer by rail. It's the first time, says Monsanto, that a chemical has been shipped that way, and the company indicates that it won't be the last.

Cyanamid Sees Future Bright for New Resin

American Cyanamid Company has a bright new resin—"Melaqua 600"—for which it predicts a big, bright future. Right now the New York-based producer is aiming at the enamel trade, and hopes to capture a good share of that 55-million-pound market.

A water-soluble melamine-acrylic resin, the product is said to have excellent durability, high enamel stability and brighter pigmentation than solvent-type amino-alkyd formulations with the same pigmentation.

These qualities, reports Cyanamid, should make the product a natural for the big enamel demand in the automobile, appliance and building fields.

Combined with a water-soluble resin

—Continued on page 67

Hercules Will Hold Line Against Rosin Market Rise

Hercules Powder Company has elected to hold the line against steadily advancing prices in the gum rosin market. The Wilmington, Del., company reports it will not advance its rosin prices during the next calendar quarter.

Prices in the open market have increased 30 cents to 50 cents a hundredweight during the past three months, according to the US Government Reporting Service. During the past year, prices have risen 50 percent.

S-W Slates Paint Plant; To Be Southwest's Biggest

Sherwin-Williams Company has slated a multi-million-dollar paint factory and wholesale distribution center for construction at Morrow, Ga., about twelve miles south of Atlanta.

Construction of the first unit in the project will get under way immediately, the Cleveland, Ohio, company reports. This will be a 40,000 square-foot warehouse. It is expected to be in operation in late fall.

The plant itself will have an annual capacity of about 7 million gallons of paint products, which will make it, according to S-W, the largest paint factory in the Southeast. Construction of the manufacturing units hasn't been scheduled yet, but it is expected that the erection work on the project will be getting under way in the very near future.

The Week's Price Changes

Castor Oil, Cottonseed Oil, Soybean Oil, Tung Oil Advanced. Bois de Rose Oil, Corn Oil, Linseed Meal, Tallow Reduced.

Prices Advanced

Castor oil, No. 1, Braz., ¼c. per lb. (p. 61).
Cottonseed meal, $1 per ton (p. 61).
Cottonseed oil, crude, ⅛c. per lb. (p. 61).
Japan wax, 2c. per lb. (p. 61).
Sandalwood, 75c. per lb. (p. 55).
Soybean oil, crude, ⅛c. per lb. (p. 61).
Refd., ⅛c. per lb. (p. 61).
Tung oil, dom., ⅛c. per lb. (p. 61).
Imported, ½c. per lb. (p. 61).

Prices Reduced

Bois de Rose, Peruvian, 5c. per lb. (p. 55).
Carnauba wax, yellow, 2c. per lb. (p. 61).
Citronella, Ceylon, 10c. per lb. (p. 55).
Coconut oil, crude, N. Y., ½c. per lb. (p. 61).
Pac. coast, ¼c. per lb. (p. 61).
Corn oil, crude, ⅛c. per lb. (p. 61).
Refd., ⅛c. per lb. (p. 61).
Greases, ⅛c. to ¼c. per lb. (p. 61).
Linseed meal, 50c. per ton (p. 61).
Oleo stearine, ¼c. per lb. (p. 61).
Soybean meal, 50c. per ton (p. 61).
Tallow, inedible, ⅛c. to ¼c. per lb. (p. 61).
Terpinyl propionate, 5c. per lb. (p. 55).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as folows:

(100—1949 average)

June 10, 1960	June 5, 1960	June 12, 1959
110.31	110.31	110.29

Farm Chemicals: A Strange Year

Canadian manufacturers of pest control chemicals had a peculiar year in 1959—they sold more product but made less profit than they did the year before. So reports the Canadian Agricultural Chemicals Association, after surveying a representative quarter of the dominion's pesticide-making firms. The survey shows that profit per sales dollar last year was 2.8 cents, while during the previous year it was 3.3 cents. Sales, however, swung the other way—almost $3 million higher.

Turnover for the surveyed firms last year amounted to $15,526,008. Profit out of that came to $443,931.

Since 1947, when the annual sales of pest control products in Canada amounted to $7 million, the volume of sales has risen steadily, indicating Canada's growing use of chemicals in the war against weeds and insects, the association reports.

The total net sales reported in 1957 represent over half the total dollar sales volume for agricultural dusts and sprays, livestock treatments, herbicides, household and industrial insecticides, rodenticides and sundry chemicals.

In the same period these companies paid approximately 2 cents per sales dollar in federal and provincial taxes on their income. The largest portion, 96 percent of the sales dollar, went to pay the operating costs of business, including wages, salaries and benefits to employees, and purchase of raw materials, according to the report.

MALLINCKRODT NUCLEAR V. P.: Dr. Charles D. Harrington, manager of its uranium division, who has been named vice-president of Mallinckrodt Nuclear Corporation, a wholly-owned subsidiary of Mallinckrodt Chemical Works, St. Louis, Mo.

Phthalate Plasticizer Hike Planned by Union Carbide

Union Carbide Chemicals Company of New York will advance its phthalate plasticizer prices on spot and contract July 1. In a move that many observers believe will spark an industry-wide price advancement, Carbide cited the recent advances in phthalic anhydride, a basic raw material in phthalate production, as the cause of its decision.

"Flexol" CC55, 380, 426, 810 and 1010 are all scheduled to go up an average of ½ cent to 2 cents per pound. The new prices for Carbide's dibutyl phthalate will be 28½ cents per pound, tankcars, and 26½ cents per pound for dimethyl phthalate, same basis. Dioctyl phthalate is scheduled to go from 25 cents per pound to 26 cents per pound, tankcars.

Aluminum Chloride Facility Is on Stream at Sarnia, Ont.

Clinton Chemical Company, Phillipsburg, N. J., has started up an anhydrous aluminum chloride plant at Sarnia, Ont., Canada, under operation of St. Clair Chemical, Ltd., a subsidiary of Clinton.

Located on a twenty-acre tract, the Sarnia plant has a capacity of 4 million pounds of anhydrous aluminum chloride a year. St. Clair Chemical is reportedly the only Canadian plant producing this chemical.

Index to News and Market Reports

Association News

MCA Elects McCurdy Chairman..... 7
MCA Elects Officers..... 53
Pharmacists State Luncheon..... 47
SOCMA Will Award Medal..... 42
Western Market Men to Meet..... 42

Government News

Additives: Washington in Control.... 7
Casein Duty Suspension Backed..... 3
Chemical Expansion Forecast..... 4
Color Additives Bill: House Vote Due.... 5
CMRA Sides With Tariff Commission.... 33
Drug Law Tightening Seen Likely..... 3
PHS Won't Allow Live Vaccine..... 3

Industry News

Ashland Contract Goes to Badger..... 3
Crude Iron Oxide Producers' Roster.... 3
Cyanamid Markets New Resin..... 4
Diamond Alkali Slates Expansion..... 5
Diamond Alkali Tells Updating Plans... 36
Enjay to Market Hexyl Alcohol..... 5
Charles Gitlan Clarifies Transfer..... 33
Chemway Adds to Line..... 46
Gen'l Dynamics Drops Morgantown Plan. 47
Goodyear to Spend $1 Million on Vinyls. 5
Hercules Holding Rosin Price Line..... 4
Hooker Phenol Plant Slated for Ky..... 3
Iron Oxide Imports: 1953-1960..... 58
Iron Oxide Pigment Producers Listed... 58
Iron Oxide Sales: 1952-1960..... 3
Iron Oxide Sales Peak Seen..... 3
Kawecki Buys Half of Rare Metals Firm. 7
Michigan Chemical Expanding Unit..... 7
o-Dichlorobenzene Shipping Time Cut.. 4
OPD Iron Oxide Report..... 3
Petrochemical Boom Continues..... 7
Phthalate Plasticizers to Be Advanced.. 4
Polyethylene Plant Set by Carbide..... 5
Polypropylene May Link Firms..... 3
Polystyrene Unit on Stream..... 33
Rexall Dickering for SchenLabs..... 5
Starch Pilot Unit On Stream..... 53
S-W Plans Paint Plant..... 4

International News

Aluminum Chloride Unit On Stream.... 4
Canadian Chemicals Awards Contract.. 47
Chemicals Up for Tariff Cuts Listed..... 5
Farm Chemicals: A Strange Year..... 4
Givaudan Plans Facility in Spain..... 5
Interhandel Trustee Named..... 46
Italy Expanding in Organics..... 7
Polish Chemical Output to Rise..... 43
Rice Bran Oil Process to Use Alcohol.. 47
Rumania Boosting Chemical Output.... 7
Solvey & Cie, Producing Allyl Derivatives 38
Synthetic Rubber Plant Underway..... 7
UK Chemical Trade Pacts Under Fire.. 5

Personnel News

American Cyanamid Advances Sommer.. 3
Cowles Elects Black..... 5
Diamond Alkali Names Richards..... 3
Jobs & People..... 38
Mallinckrodt Unit Elects Harrington.... 4
Varcum Appoints Knell..... 7

Market Reports

Acids 54
Adhesives 49
Agricultural Chemicals 40
Aliphatic Organics 41
Aromatic Chemicals 55
Botanical Drugs, Gums 51
Chemical Specialties 49
Coal Chemicals 44
Coatings Materials 59
Drugs 50
Essential Oils 55
Fats & Greases 62
Fatty Acids & Alcohols 49
Fertilizer Materials 40
Fine Chemicals 50
Heavy Chemicals 34
Industrial Organic Chemicals 41
Metals, Nonferrous 34
Naval Stores 60
Oil Cake & Meal 61
Oils 61
Paint Materials 59
Pesticides 40
Petrochemicals 41
Petroleum Derivatives 39
Protective Coatings Materials 59
Softening Agents 67
Spices 66
Surfactants 67
Trade Name Chemicals 49
Waxes 66

General Features

Advertisers' Index 67
Association Meeting Dates 7
Bids Wanted 66
Classified Advertisements 66
Coal Chemical Output 44
Crude Oil Stocks 39
Current Market Quotations 10
Editorials 9
Imports 52
Jobs & People 38
Obituaries 43
OPD Price Index 4
OPD Reports from Europe..... 5
Washington Talks It Over 9

OIL, PAINT AND DRUG REPORTER, Vol. 177, No. 25, June 13, 1960. Published weekly on Monday except semi-weekly the last week in February and the last week in August by Schnell Publishing Company, Inc., 30 Church Street, New York 7, N. Y., U.S.A. Second-Class postage paid at New York, N. Y. Single copy price: 50 cents. Subscription prices:—United States and Possessions, $5 a year; Canada and Newfoundland, $7; other countries, $12. Copyright, 1960, Schnell Publishing Company, Inc.

Salvador Sanz de Acedo

Givaudan Is Forging Another Link in Chain

The seventh link in an international chain is now being established by the Givaudan interests—this one a factory in San Celoni, about thirty-five miles from Barcelona, Spain. To be known as Givaudan Iberica SA, the plant will supply, basic aromatic materials for the soap, perfume and cosmetic industries in Spain.

The unit will be ready for production in about one year. Its initial output program will comprise the following:

Nitro musks, phenylethyl alcohol, cinnamic alcohol and aldehyde, citronellol, geraniol, hydroxycitronellal and other derivatives of citronella oil, linalool and linalyl acetate and other bois de rose derivatives, the ionones and methyl ionones, benzyl alcohol, benzyl benzoate, benzyl isoeugenol and other derivatives of benzyl chloride.

In the near future the Givaudan interests will have an eighth link in their chain: That will be the unit now being built in Argentina.

Other Givaudan plants are located in Geneva, Switzerland, which is the home base; Delawanna, N.J., and France, England, Italy and Brazil.

Salvador Sanz de Acedo, a grandson of Xavier Givaudan, will be managing director of the new Spanish company through his position as executive vice-president. Mr. Sanz is presently visiting the United States and has established a personal contact with the manufacturing, research and development departments in Delawanna.

Along with Mr. Sanz, the other officers of the new Spanish company will include: chairman of the board, Xavier Givaudan; president, Jose Valls Taberner, and vice-president, Andre Givaudan.

Rexall Drug & Chemical Dickering for SchenLabs

Rexall Drug & Chemical Company is dickering for the purchase of SchenLabs Pharmaceuticals, Inc., ethical drug division of Schenley Industries, Inc.

The deal now under discussion calls for SchenLabs to become part of Riker Laboratories, Inc., Northridge, Calif., Rexall's pharmaceutical manufacturing division. Terms of the proposed acquisition have not been divulged.

The Schenley unit produces sedatives, antihistamines, drugs for liver ailments, antacids and laxatives.

OPD Reports From Europe

UK's Chemical Price Pacts, Raw Material Pools in Limbo Because of Court Decisions

This is OPD's third on-the-spot chemical report from Europe. The new series began in the May 30th issue, and previous articles have covered UK production potential today and current threats to British chemical markets—both home and abroad.

The traditional British practice of controlling competition through industry associations is under sustained fire, and price-fixing agreements and raw material pooling arrangements for major chemical products are in a limbo of uncertainty as a result of recent decisions by the United Kingdom's Restrictive Practices Court. The court has started formal proceedings on the price-fixing pacts of the United Kingdom Glycerine Producers Association and the imported sulfur pool operated by the National Sulphuric Acid Association. The court in April held a price-fixing agreement by Britain's Phenol Producers' Association to be "contrary to public interest."

The Association of British Pharmaceutical Industry in recent weeks has voluntarily abandoned the "price recommendation system" of its manufacturing and wholesale druggists group, following a discussion with the Registrar of restrictive trading agreements. This is the UK official who prosecutes such agreements before the court.

Drug Pact Won't Be Defended

The "price recommendation" list of the manufacturing druggists had been in existence for a number of years, and was set by committees on the basis of cost data from manufacturers. The association, however, decided not to defend the agreement before the court.

Many UK business leaders believe that as a result of the sweeping decision in the phenol case, all price-fixing agreements—and possibly many other types of common industry and company agreements—can be overturned.

At many levels throughout British industry there is a strong feeling that such agreements are good and operate in the public interest by eliminating "wasteful competition." Price-fixing arrangements in general have a long history in the United Kingdom.

The court has tried fourteen trade agreements in all. Only one has been upheld in its entirety and twelve have been thrown out completely. The court operates under the restrictive practices act of 1956 which also created the Registrar and Register of restrictive trading agreements.

The Register includes all "collective agreements on prices or other terms or conditions, and collective agreements which involve discrimination between persons, the sharing of markets, or restrictions on production or processing."

In all more than 2,000 agreements are in the Register now and nearly 200 of them involve chemical products. A sample of the chemical products covered by agreements on file includes: analytical chemicals, benzol, calcium carbide, catalysts, cellulose acetate, cresylic acid,

—Continued on page 48

Diamond Sets Enlargement Of Its Belle, W. Va., Unit

Diamond Alkali Company has slated a long-range expansion program for the Belle, W. Va., plant of its chlorinated products division.

Modernization of facilities for production of methyl chloride, methylene chloride and chloroform is the initial step in the Cleveland, Ohio, company's program. Engineering work is now under way.

COWLES DIVISION MANAGER: Frank F. Black, formerly manager of its organic chemical department, who has been appointed general manager of the newly-created chemical division by Cowles Chemical Company, Cleveland, Ohio.

Goodyear to Spend $1 Million on Vinyls

Goodyear Tire & Rubber Company is going to put another $1 million into vinyl resins. That is the sum the Akron, Ohio, company has decided to spend on an increase in production facilities at its Niagara Falls, N.Y., vinyl plant.

The expansion, Goodyear says, will add about 20 million pounds annually to the plant's total capacity and will double facilities for two specialty dispersion resins handled by the Goodyear Chemical Division.

The new resins—"Pliovic WO and Plio-

—Continued on page 53

DuPont Nylon Expansion Points at Tire Cord Arena

E. I. duPont de Nemours & Co. will more than double its nylon yarn capacity in an expansion at its Richmond, Va., facilities.

Slating of such a broad capacity boost is taken by observers as proof of the Wilmington, Del., company's confidence that nylon will triumph over rayon in its bid to grab the $300 million tire cord market. Nylon already has a sizable share of the replacement market, but rayon is dominant in new tires.

Plans call for installation of additional nylon-producing units at Richmond plus a production increase at the existing plant.

Color Additives Up for House Vote Within Few Days

The administration's color additives bill, HR 7624, reported to the house floor with only a few minor amendments by the commerce committee, will be called up for passage in the house in a week or ten days.

House leaders have a request under consideration from commerce committee chairman Oren Harris of Arkansas asking that the legislation be given a preferred status. They will hold hearings on the matter this week, and a prompt decision is expected.

Chemical industry representatives, seeking to have the impact of the Delaney anti-cancer clause softened, are pinning their hopes on the action of the senate-house conference committee.

Differences Will Be Ironed Out

The joint group will meet to iron out differences in the legislation after the house passes the bill. The bill passed the senate last year without the Delaney clause.

Because of the wide differences between the two legislative bodies on this point, the entire matter is open to compromise.

There would be nothing to prevent the conference committee from agreeing on the Delaney clause with modifying amendments in line with suggestions of the industry.

Any such modifying amendments will be strongly objected to by the Delaney forces in the house, however.

The only concession made to industry in the clause, as the bill was reported to the house, is the inclusion of provisions permitting industry to appeal to an ad hoc committee of scientists on questions revolving around the classification of a substance as a carcinogen.

In its report, the house committee makes it clear that the ad hoc committee is to pass on the question of carcinogenicity, not the safey of a color additive.

Industry is given thirty days in which to ask for referral of the question to the ad hoc committee, dating from the time a proposed order is published in the *Federal Register*. The ad hoc committee then has sixty days to consider the question and can take another thirty days if necessary, after which the Secretary of Health, Edu-

—Continued on page 42

Enjay Just About Ready To Market Hexyl Alcohol

Enjay Chemical Company, New York, is just about ready to start marketing hexyl alcohol in commercial quantities.

An announcement on the large volume debut of this oxo alcohol, now in semi-commercial production, is due from the company within the next four to six weeks.

Enjay is believed to be eyeing a market of better than 5 million pounds a year for hexyl alcohol.

Reports of Enjay's imminent commercial production of hexadecyl alcohol, however, are regarded as premature. The word is that the material probably won't be marketed by Enjay in large volume until, perhaps, early 1963.

Polyethylene Plant in Fla. Is Set by Union Carbide

Union Carbide Corporation will build a 110-million-pound-a-year polyethylene plant next to existing facilities near Ponce, Fla. Start-up time is slated for about two years hence.

The combined facility will represent the largest single industrial enterprise on the island, according to Carbide.

Union Carbide Caribe, Inc., a subsidiary of the New York company, will operate the polyethylene unit. Carbide says an additional petrochemical expansion is in the planning stage for its Caribbean subsidiary. These plans will be divulged in the near future, the company adds.

Chemical Men Read Small Print That Says: GATT

Chemical men are reading the small print this week, and will be for some time to come.

They are finding it very interesting reading, for it contains the whole list of items—several hundred of them—in the chemical schedule of the tariff law slated for possible duty reductions by the US. The position on the chemicals will be hashed out when this country enters into trade bargaining sessions with member nations of the General Agreement on Tariffs & Trade (GATT) later this year and early in 1961.

The complete list of chemical concessions the US is prepared to make is printed in one grouping at the end of this article, beginning on page 56.

Copies of the State department's May 27 announcement of this government's intentions to negotiate, together with the list of chemicals and other products that might be involved, were mailed out last week by the trade associations in the chemical fields.

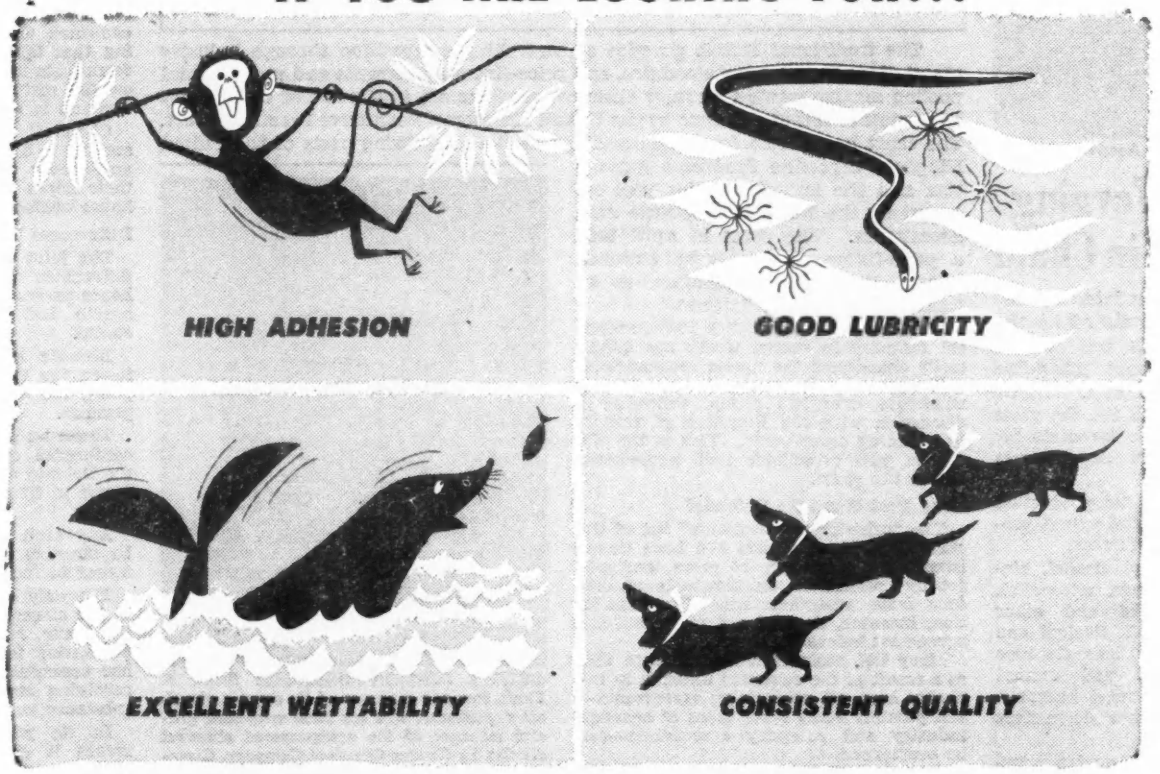
Members were urged to examine the list carefully in preparations for the hearings scheduled for next month.

Objectors to the inclusion of any items on the proposed list will have two opportunities to present their arguments to the government: once before the Committee for Reciprocity Information, which considers the question whether an item should be on the list for negotiation, and again before the Tariff Commission, which considers the lowest level of duty that can be maintained safely without imperiling domestic producers.

Persons wishing to testify before either or both groups are required to file notification of intentions by June 27 with the

—Continued on page 56

IF YOU ARE LOOKING FOR...



INVESTIGATE CSC's NEW SYNTHETIC WAXES

NOW COMMERCIALLY AVAILABLE

TX-1 and TS-254 have made the grade from laboratory to plant production. They are oxazoline waxes—an entirely new product series from CSC's Nitroparaffins. Since they are synthetic, availability and consistency of quality present no problems.

TX-1 is a hard, high-melting emulsifiable resin-like wax, light brown in color, translucent in appearance.

TS-254 is a hard, medium-melting, cream-colored wax.

ATTENTION AEROSOL FORMULATORS: These waxes form true solutions in many organic liquids thus greatly simplifying aerosol formulation problems. No settling in the can! No clumps to block the orifice!

The oxazoline structure is unique among waxes, both natural and synthetic. From it comes *high adhesion, good wetting on hard surfaces* and *good lubricity. These waxes are compatible with most natural and synthetic waxes.* Stable gels or pastes are formed when they are dissolved in high concentrations in many organic liquids.

Because of these properties, TX-1 and TS-254 are expected to be useful in self-polishing floor waxes, paste polishes, leather, paper, and textile finishes, synthetic lubricants, metalworking lubricants, cosmetics, as mar-proofing agents in enamels, and as pigment grinding assistants.

There are four other oxazoline waxes also available. Let us discuss your specific problem and provide you with samples. Write on your letterhead to Market Development Department, Commercial Solvents Corporation, 260 Madison Avenue, New York 16, New York.

PHYSICAL PROPERTIES	TS-254	TX-1	ES-254	TS-254A	TS-254AA	TS-970
Melting point °C	63	160	37	50	93	74
Volume Expansion on melting—%	7.7	—	8.9	9.2	9.2	9.1
Penetration, ms/100 gm. load (ASTM D5-25)	0.2	—	1.3	0.3	0.4	0.1
Acid No. (approx.)	7	12	9	2	1-2	6
Solubility, % by wt. in:						
Butanol	7	49	50	22	13	4
Toluene	16	52	49	16	7	16
Carbon Tetrachloride	16	47	49	gel	14	gel
Stoddard Solvent	12	52	49	17	4	5
Butyl Acetate	11	55	49	13	9	6
Methyl Isobutyl Ketone	10	Ins.	49	10	8	8
Turpentine	21	10	24	21	10	10

COMMERCIAL SOLVENTS CORPORATION

Additives: Washington's

Fears that the state governments, led by Wisconsin, are out to challenge Washington's primacy in the field of additives legislation are being allayed this week.

A committee appointed by Wisconsin's Governor Gaylord Nelson has just come up with a report backing federal leadership on additives legislation and enforcement.

But Washington is advised in the report to expand its enforcement activities in order to secure full compliance with regulations.

In other recommendations, the committee urges continuing and expanding research by federal agencies, industrial laboratories, and universities to insure protection of public health without "raising unnecessary obstacles to improvement in methods of food, production, processing and preservation."

The Delaney clause in the food additives law constitutes one such obstacle, in the committee's view. The report advises substitution of this clause by one that would permit use of a carcinogen whenever a safe level of use can be established through research and through evaluation by a properly qualified board of experts.

This would be more in line with what the committee terms a "law of reasonableness."

For instance, the report notes: "A solution of common table salt, in greater concentration than found in body fluids, is known to be capable of causing cancer in rats when injected subcutaneously. In addition, other natural substances are capable of producing cancer under conditions of unusual concentration and

—*Continued on page 67*

Petrochemical Boom in Southwest Resounds to 'Black Gold' Stampede

A thundering stampede for "black gold" has made the southwest one of the hottest areas in the country, chemical boom-wise. "Black gold" means petrochemicals, oil-derived building blocks that won't cool off in the chemical marketplace until the oil is all gone, many years hence. And this means a mighty, continuing boost for Texas and Louisiana, where the petrochemical industry has sunk its roots deep into Houston's deep-water harbor, into the off-shore tidelands, the rivers, bustling Baton Rouge. All this, in a business-like way is divulged in the latest issue of *Business Review*, a publication of the Federal Reserve Bank of Dallas.

VARCUM SALES MANAGER: Leonard W. Knell, appointed sales manager of Varcum Chemical Corporation (Canada), Ltd., Weston, Ont., wholly-owned subsidiary of Reichhold Chemicals (Canada), Ltd.

The effervescence of petrochemicals is a concept of immediate appeal to market men, though perhaps a puzzler for chemists:

Fifteen Years of Boom

In fifteen short years, the industry's production and sales have been hustled upward to six times their rate when World War II ended. Production has risen from 8 billion pounds in 1945 to some 50 billion currently; sales in the same period rose from $1 billion to an annual rate of $6 billion.

And still, the market is only budding, say the bankers. A sure sign of real efflorescence to come, they add, is the current prevalence of cut-throat competition. Every type of civil war adds its

—*Continued on page 37*

Rubber Plant Being Built

Firestone Tire & Rubber Company has broken ground in Port-Jerome, France, for its multi-million-dollar synthetic rubber manufacturing plant. The unit is scheduled for completion in 1961. It will have an initial annual production capacity of 10,000 long tons.

Kawecki Chemical Buys Half of Rare Metals Firm

Kawecki Chemical Company, Boyertown, Pa., has acquired for cash a 50 percent interest in Penn Rare Metals, Inc., Revere, Pa. Purchase price was not disclosed.

While the companies will continue production and research activities independently, Kawecki will take an active part in Penn's management and will act as its exclusive sales agent, according to a joint announcement by the companies.

Italy Is Expanding in Organics And America Gets the Challenge: If You Can't Lick 'em, Join 'em

Formidable expansion of Italy's producing potential in the field of organics brings American chemical companies face to face with a life-and-death challenge: How to hold on to their stake in that country as its chemical import needs dwindle with expanding domestic production? The answer is made clear in a rundown on Italian chemicals just published by Business & Defense Administration: If you can't lick 'em, join 'em. BDSA reports that several US-backed companies are now figuring prominently in the chemical expansion splurge in Italy.

Celene, 50 percent owned by Union Carbide Corporation, New York, has a plant under construction at Priolo Millilli, Sicily, which will produce 25,000 tons a year of ethylene derivatives, including oxide, glycol and polyethylene. The unit will be ready to go on stream any day now.

Sicedison's Capital Increased

Sicedison, 40 percent owned by Monsanto Chemical Company, St. Louis, Mo., has just had its capital increased from $25.6 to $48 million. What's more, the company is now completing a new section at its Porto Marghera plant for production of hydrocyanic acid. Work is also in progress on a unit to make fluorinated hydrocarbons for propellants and refrigerants. An affiliated company will supply hydrofluoric acid, the raw material.

At Porto Marghera, an acrylic fiber plant has just been completed by ACSA, which is 40 percent owned by Chemstrand Corporation, Decatur, Ala. Productive potential is rated at 8,000 tons of fiber a year.

Although Italy's chemical imports were still growing as of 1958, the pace had slowed considerably, and the end of the postwar upward spiral appeared to be in sight, according to the BDSA report. From a 1954 total of $124.8 million, imports jumped to $152.4 million the following year, and scored another broad jump to $182.4 million in 1956.

But, in recession-bound 1957, imports fell to $179.7 million, and then, the following year gained a little to reach $193 million.

Meanwhile, 1958 brought a substantial increase in the country's production of key organic chemicals:

Production of phthalic anhydride,

—*Continued on page 46*

Michigan Chemical Starts Plant Expansion Project

Construction is under way at Michigan Chemicals Corporation's St. Louis, Mich., plant leading to enlargement and further specialization of the company's manufacturing facilities for fine chemicals and organic and inorganic intermediates.

New equipment is being installed in an existing building which has been adapted to meet standards for pharmaceutical chemicals manufacture.

Besides serving its own needs, the new semi-plant and multi-purpose special equipment, involving an expenditure of about $300,000, will provide Michigan Chemical with added facilities to produce a wider variety of chemicals.

MCA'S NEW CHAIRMAN: R. C. McCurdy, president of Shell Chemical Company, New York, who was elected last week as the new board chairman of the Manufacturing Chemists' Association.

Rumania Developing Good Chemical Clime

Soda ash output will increase 60.1 percent this year over '59 levels; production of nitrogen fertilizers will be boosted 151.4 percent; output of synthetic yarns and fibers will more than triple, while the plastics and synthetic industry chalks up a neat 100 percent gain. All this is in Rumania.

Starting from a rather small base, the Rumanian chemical industry, it is said, can strive for such big gains without really straining its economy. The goals were divulged in a recent publication of the Rumanian Chamber of Commerce.

Specific projects in the one-year plan include a second soda works, a caustic soda factory and two units for manufac-

—*Continued on page 66*

Dixon Eyes Drug Field With Kaltman Proposal

Dixon Chemical & Research Inc., looking for new worlds to conquer, is setting its sights on the drug field. D. Kaltman & Co., a distributor of drugs and pharmaceuticals, has entered into an agree-

—*Continued on page 66*

Association Meetings

American Chemical Society, national meeting, New York, September 11-16.

American Institute of Chemical Engineers, international chemical engineering meeting with Instituto Mexicano de Ingenieros Quimicos, Mexico City, Mexico, June 19-22.

American Leather Chemists Association, annual meeting, Lake Placid Club, Lake Placid, N. Y., June 19-22.

American Pharmaceutical Association, annual meeting, Shoreham hotel, Washington, D. C., August 14-20.

American Society for Testing Materials, annual meeting, Chalfonte-Haddon Hall, Atlantic City, N. J., June 26-July 1.

Armed Forces Chemical Association, annual meeting, Sheraton-Park hotel, Washington, D. C., September 15-16.

Association of Consulting Chemists & Chemical Engineers, annual meeting, Shelburne hotel, New York, October 25.

Canadian Agricultural Chemicals Association, annual meeting, Britannia hotel, Lake of Bays, Muskoka, Ontario, September 12-14.

Canadian Manufacturers of Chemical Specialties Association, annual meeting, Queen Elizabeth hotel, Montreal, Que., Canada, October 24-26.

Chemical Institute of Canada, annual conference and exhibition, Ottawa, Ont., June 13-15.

Chemical Market Research Association, Wentworth - by - the - Sea, Portsmouth, N. H., September 22-23; Pittsburgh Hilton hotel, Pittsburgh, Pa., November 9-10.

Drug, Chemical & Allied Trades Association, spring luncheon meeting, Commodore hotel, New York, June 21; annual meeting, Sagamore hotel, Bolton Landing, Lake George, N. Y., September 15-18.

Electrochemical Society, Shamrock hotel, Houston, Tex., October 9-13.

Federation of Societies for Paint Technology, annual meeting, Sherman hotel, Chicago, October 31-November 2.

Gordon Research Conferences, petroleum, coal chemistry and lipide metabolism meetings, Colby Junior College, New London, N. H., New Hampton School, New Hampton, N. H., Kimball Union Academy, Meriden, N. H., June 13-17.

National Agricultural Chemicals Association, annual meeting, Del Coronado hotel, Coronado, Calif., September 27-29.

National Foreign Trade Council, national meeting, Waldorf-Astoria hotel, New York, November 14-16.

National Paint, Varnish & Lacquer Association, annual convention, Drake hotel, Chicago, October 27-29.

National Plant Food Institute, annual convention, Greenbrier hotel, White Sulphur Springs, W. Va., June 12-15.

Parenteral Drug Association, Edgewater Beach hotel, Chicago, June 24; annual convention, Statler hotel, New York, October 19-21.

Pharmaceutical Manufacturers Association, eastern regional meeting, Waldorf-Astoria hotel, New York, December 12-14.

Salesmen's Association of the American Chemical Industry, annual sales clinic, Roosevelt hotel, New York, November 14.

Society of Chemical Industry, annual meeting, Bristol, England, July 4-9.

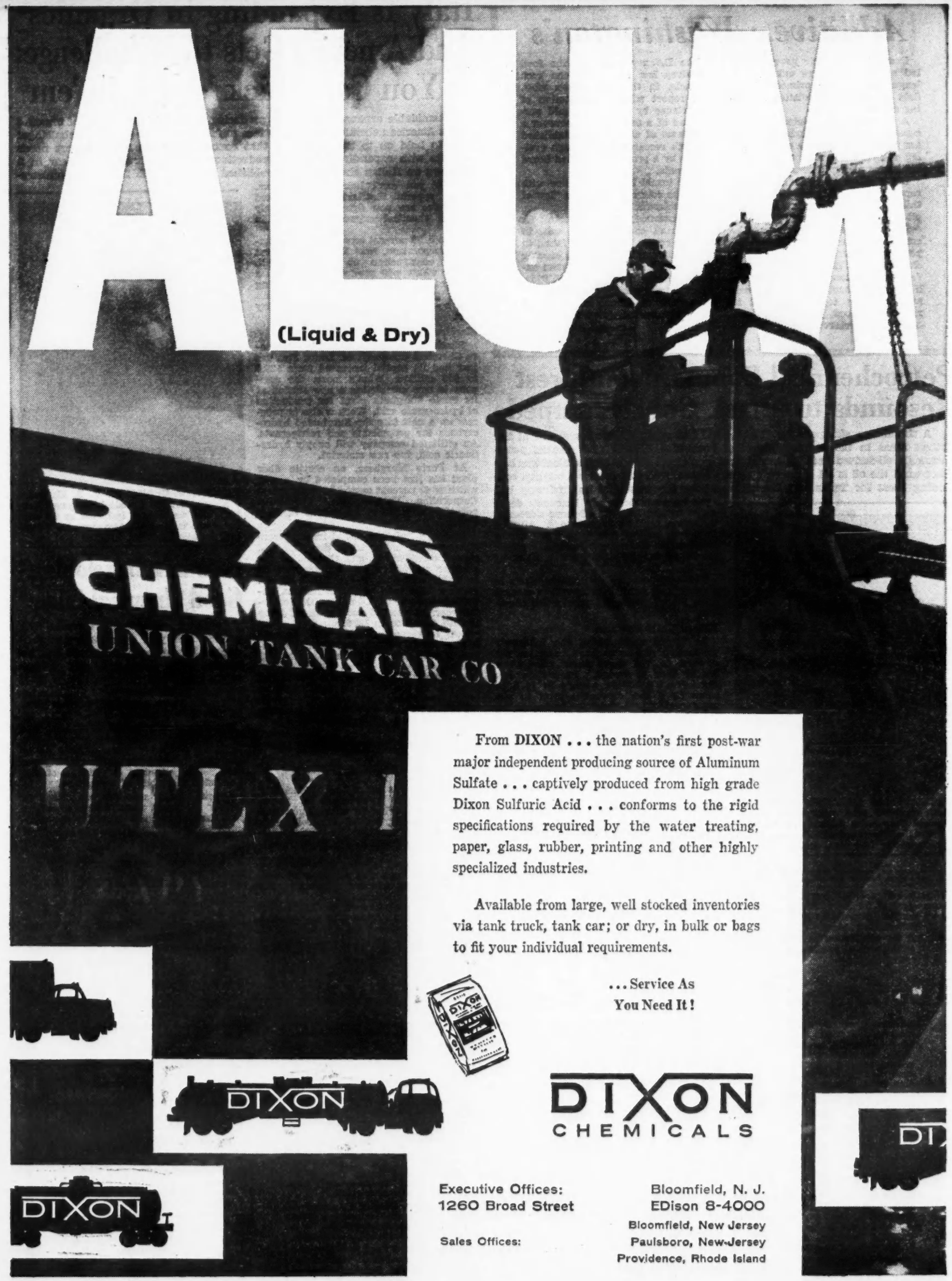
Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, June 14.

Toilet Goods Association, annual meeting, Poland Spring House, Poland Spring, Maine, June 27-29; scientific section's winter meeting, Waldorf-Astoria hotel, New York, November 30.

Western Packaging & Materials Handling Exposition, Pan Pacific Auditorium, Los Angeles, July 15-21.

ALUM

(Liquid & Dry)



From **DIXON** . . . the nation's first post-war major independent producing source of Aluminum Sulfate . . . captively produced from high grade Dixon Sulfuric Acid . . . conforms to the rigid specifications required by the water treating, paper, glass, rubber, printing and other highly specialized industries.

Available from large, well stocked inventories via tank truck, tank car; or dry, in bulk or bags to fit your individual requirements.

. . . Service As
You Need It!

DIXON
CHEMICALS

Executive Offices:
1260 Broad Street
Bloomfield, N. J.
EDison 8-4000

Sales Offices:
Bloomfield, New Jersey
Paulsboro, New Jersey
Providence, Rhode Island

Oil, Paint and Drug Reporter

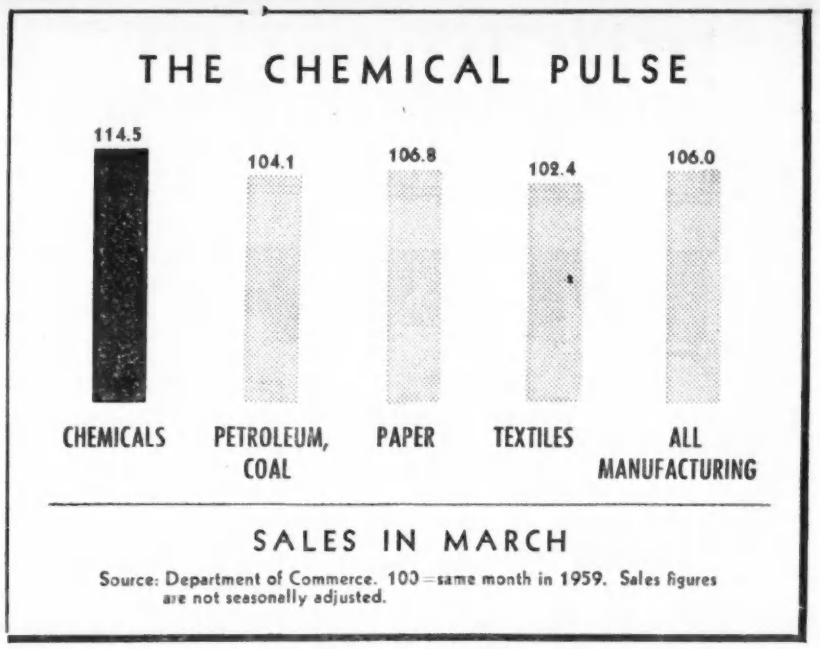
THE CHEMICAL MARKET AUTHORITY

Founded October 18, 1871 by William O. Allison
Directed 1900-1942 by Harry J. Schnell

EDITOR AND PUBLISHER: William S. Auchincloss
ASSISTANT PUBLISHER: J. Stuart Auchincloss
MANAGING EDITOR: Arthur R. Kavaler
TECHNICAL EDITOR: Edwin M. Fisher
NEWS EDITOR: Gene Gasteiger
OPD SPECIAL REPORTS: Don L. Richards
MARKETS: Andrew C. Barchi, John L. Casey, Richard Consolas, James Gubitosi, Jacqueline Hudgins, Harvey McCormick, Harry Van
IMPORTS: Mary Van Grieff
CONSULTING EDITOR: Hugh Craig
WASHINGTON EDITOR: Ralph L. Cherry, 956 National Press Building, Washington 4, D. C.
EUROPEAN EDITOR: Clare M. Cotton, 26A Wellington Road, London NW 8, England
SCHNELL PUBLISHING COMPANY, INC., 30 Church Street, New York 7, N. Y
(RE 2-9820) Cable Address: Reporter, New York
PRESIDENT: William S. Auchincloss
VICE-PRESIDENT: Jean Schnell Auchincloss
TREASURER: William S. Auchincloss
ASSISTANT TREASURER: Ruth D. Johnson
SECRETARY: Anne L. Koch
ASSISTANT SECRETARIES: J. Stuart Auchincloss, Sara Jane Auchincloss

Copyright 1960 by Schnell Publishing Company, Inc.
Member of Audit Bureau of Circulations

Volume 177 June 13, 1960 No. 25



For Better Drugs

The shifting of governmental probing of the drug industry from legislative—political, if you will—investigating of prices, profits, and practices to administrative concern with respect to products faces the industry with several serious problems. Some concept of some aspects of those problems can be got from the objectives of the Secretary of Health, Education & Welfare stated on page 49 last week. Other aspects stem from the official interest in how to regulate the regulators emanating from the disclosure some weeks ago of individual misfeasance and malfeasance in the Federal Power Commission. Those aspects present a number of perplexing problems having to do with relations between regulators and regulated, none of which were covered by the Secretary of Commerce in what he had to say on "The Role of Business in Public Affairs" at this year's annual meeting of the Chamber of Commerce of the United States.

There is little, if any, reason to believe that the Food & Drug Administration has not been doing all that it possibly can effectively do to administer the patchwork of statutes with which it is entrusted. There is some reason to believe that it does not have the power or the personnel to do a completely satisfactory job. The investigation planned by the HEW chief can do much to clarify the situation. But, it will not be able to do any remedying of faults that are of statutory, not of operative derivation.

The Harris bill now before congress would establish a code of ethics for federal regulatory agencies. In view of what has been disclosed in several instances with reference to relations between regulators and regulated, the national organizations of industrial and commercial enterprises should give serious consideration to the adoption and enforcement of similar codes for their members. Such a project will be sorely needed until that day arrives when governmental procedures reach a stage that will make the industry-sponsored task unnecessary.

Summit Conferences

Expectations—and guesses—on what can, may, or will come out of the conversations of the President of the United States and the Prime Minister of Canada run all over a broad and long range in many respects. The relations between this country and its northern neighbor are not all that they should be in all areas of political, commercial, and social economy. Their improvement in no respect presents a difficult task, but it does call for the promotion of better acquaintance and knowledge and understanding among the two closely related peoples.

In a political respect, there is much to be thought about in the recent urging by the Prime Minister that there be a summit meeting of the members of the North Atlantic Treaty Organization to "conduct a searching reassessment of the future" of that organization. The potentialities in that direction are many and desirable, especially in what he said was essential—"to deal purposefully and intelligently in our relations with the Soviet Union."

For reasons which need no emphasizing for those who could deal intelligently in those relations, there is a more imperative call in the recent suggestion by a former US ambassador to the Dominican Republic that all members of the Organization of American States join in a summit conference, "the agenda being set up beforehand by their foreign ministers and all decisions to be made within the OAS framework," the objective being to "achieve the solidarity needed to face the threat of communism."

Whatever may be the outcome of the invitation that the Russian premier visit Cuba—accepted also by the top Chinese Red—there is a need not only for achievement of anti-Communism solidarity but also for satisfactory dealing with what the former ambassador refers to as "the political and economic problems that have caused a breach in our relations with other countries of this hemisphere."

Labeling for Safety

It is not to be expected that the hazardous label bill which appears to be progressing quite promisingly in congress will be satisfactory to all groups for which it has a more or less pertinent significance. The major difference of opinion and reaction will, of course, be that between those who are primarily concerned in some manner and to some degree of minuteness with the safety of individuals, especially the very young, and those whose interest is in the servicing of the public in its innumerable needs.

The legislators can be expected to have a large measure of interest in—if not concern for—the views of both groups. But, it is not easy to understand why they refused to regard label information necessary to assure the safety of those in commercial contact with potentially hazardous articles, who are not adequately acquainted with the hazardousness of a commonly handled article.

The satisfactory defining of hazardous substances is not going to be a simple undertaking. There are few, if any, chemicals or drugs which cannot be hazardous under some condition. That, of course, is something with which labeling cannot effectively deal. A label means nothing to a child. Unfortunately, it very often means no more to an adult in connection with the protection of children.

Producers of chemicals and drugs which fall within the scope of the hazardous label bill are fully cognizant of their responsibilities and willing and ready to make every possible endeavor to meet them effectively. The same cannot be said with reference to distributors or users of such substances, although, even though the dealer's containers need not be protectively labeled under the federal law, such labeling may be—and widely is—required under state or local regulation. And it is required for containers sold to the public. The extent to which those requirements are complied with is a matter for local policing. State boards of pharmacy do a good job in that respect, but they do not have authority to inspect or direct the practices of dealers other than druggists, except for certain drugs. Local health agencies do the best they can—which is not much.

Whatever may be the efficacy of even the commercially most respected hazardous labeling regulations, there will be a critical need for education of the public. That cannot be met by means of any labeling insofar as it has to do with the keeping of hazardous articles out of the hands of children. All groups concerned in any manner with what makes the hazardous label necessary must collaborate in the providing of such educating adequately and continuously.

Washington Talks It Over

Science Is Here to Stay, But Chemical Industry Leaders Are Beginning to Wonder Just Where It Is Going to Find a Place in the Framework of the Administrations to Come.

By Ralph L. Cherry
Washington Editor

A quiet controversy is bubbling between the White House and the Capitol over President Eisenhower's scientific advisory set-up. Some of the legislators want to give the group more statutory basis than it has now, but the White House is resisting these efforts.

The dispute has been pretty much under cover, since time is running out on this administration and it is not deemed proper to tell the incoming President how he should run his affairs. But the chemical industry has a broad interest in it as portending things to come.

More than anything else, it indicates that congress is far from satisfied with the present arrangement and would like to see the making of scientific policy in the government put on a more permanent basis. The old idea of several years ago to set up a Department of Science with Cabinet office rank is far from dead.

At the present time, the President is advised on scientific matters by a special assistant for science and technology, an office created in November, 1957, after Russia launched Sputnik I, and currently filled by Dr. George B. Kistiakowsky.

In addition, there is a science advisory committee which serves as a working group to study scientific and technical problems and to recommend solutions. Membership of the committee changes according to the particular problem involved.

The two offices have served a useful purpose in incorporating science into government policy, but the thing that worries the legislators is whether the system will continue under another President. They exist now by virtue of executive orders of the President and, of course, are subject to change by the same route.

What some members would like is to have the scientific group set up on the same basis at the economic council. The Council of Economic Advisers is provided for in the full employment act passed by congress a decade or more ago. The council prepares the economic report made annually to congress by the President.

Something similar in the way of a scientific council, which once a year would review scientific progress and point the way of new developments of a policy nature, would be helpful to industry and congress.

OPD'S BOOKSHELF

The Word

Science, says the author of THE NATURE OF SCIENCE,* is not just a study of nature, or the material side of life, as the general public thinks it to be. David Greenwood, who is more of a philosopher than a scientist, approaches his subject in the rarified atmosphere of logic and mathematics, and emphasis throughout is on the linguistic aspect of science and mathematics.

To those who concern themselves with the application of syntax and semantics to the language of modern science, the book should be of considerable interest. It should be noted that the author, reviving the classical use of the term, uses "science" to mean every form and type of knowledge this side of theology, whether the knowledge is arrived at by formal reasoning or ordinary common sense.

* THE NATURE OF SCIENCE. By David Greenwood. 95 pages. The Philosophical Library, New York. $3.75.

CHEMICALS AND RELATED MATERIALS

All matters under this heading fully protected by copyright.

Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, June 10 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Abies siberica oil, cns. ..... lb. 1.90 - 2.40
Acacia (see Arabic gum).
Acetaldehyde 99%, dms., c.l., works. lb. .12 - —
dms., l.c.l., works ..... lb. .13½- —
tanks, works ..... lb. .10 - —
Acetaldol (see Aldol).
Acetanilide, tech., flaked, bbls., bgs., c.l., frt. alld lb. .32½- —
bbls., bgs., ton lots, frt. alld. lb. .33½- —
bbls., bgs., smaller lots, frt. alld lb. .36½- —
USP, bbls., 225-lb. dms., any quantity lb. .79 - —
100-lb. dms., any quantity lb. .81 - —
Acetic acid, coml., or redist., 28%, bbls ..100 lbs. 4.80 - —
56%, bbls. .....100 lbs. 8.25 - —
70%, bbls. .....100 lbs. 9.95 - —
80%, bbls. .....100 lbs.10.45 - —
Acetic acid, glacial, syn., CP, dms., dlvd ..100 lbs.22.00 -23.00
tech., dms., c.l., dlvd....100 lbs.13.75 - —
dms., l.c.l., dlvd.....100 lbs.15.25 - —
tanks, dlvd. .....100 lbs.10.00 - —
USP, cbys., dlvd .....100 lbs.31.00 -32.00
Acetic anhydride, aluminum ret. dms., c.l., dlvd. E lb. .16½- —
aluminum ret. dms., l.c.l., dlvd. E. lb. .18 - —
tanks, dlvd. E ..... lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
fib. dms., l.c.l., dlvd ..... lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd lb. 1.35 - —
fib. dms., l.c.l., dlvd ..... lb. 1.36 - —
Acetoacet-o-toluidide, fib. dms., c.l., dlvd lb. .82 - —
fib. dms., l.c.l, dlvd ..... lb. .83 - —
Acetone, CP, dms., c.l., dlvd .. lb. .11 - —
dms., l.c.l., dlvd ..... lb. .12½- —
tanks, dlvd. ..... lb. .08½- —
Acetonitrile, dms., c.l., t.l., dlvd .. lb. .35 - —
dms., l.c.l., dlvd ..... lb. .36½- .37
tanks, dlvd. ..... lb. .32 - —
Acetophenetidin, USP, 200-lb. dms., 1,000 lbs., frt. alld lb. 1.22 - —
100-lb. dms., 1,000 lbs., frt. alld. lb. 1.24 - —
Acetophenone, cns., dms ..... lb. .42 - 1.30
Tech., dms., c.l., works..... lb. .37 - —
dms., l.c.l., works..... lb. .37¾- —
tanks, works ..... lb. .35 - —
N-Acetyl-p-aminophenol, dms., t.l. (min. 23,000 lbs.), frt. adjusted lb. 1.24 - —
dms., smaller lots, same basis lb. 1.35 - 1.63
dms., 5,000-lb. lots, same basis lb. 1.30 - 1.45
Acetylene black, imp., bgs., c.l., duty and freight extra lb. .19 - —
cs., l.c.l., ex whse..... lb. .24½- .30
Acetylene tetrabromide, 16-dm. lots or more, f.o.b. works lb. .53 - —
Acetylsalicylic acid, USP, special, makers, primary distr., bbls., 1,000-lb. lots, point of shipt. lb. .63½- —
USP, standard, fine, cryst., gran., (20-40 mesh) powd., (80 mesh.) 250-lb. bbls., c.l., t.l., same basis lb. .55¼- —
Freight equald, shipt. identical quantity over standard routes, from N.Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .35½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .36½- —
tanks, frt. alld. E. of Denver. lb. .33 - —
non-ret. dms., c.l., frt. alld. E. of Denver lb. .39½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .40½- —
tanks, frt. alld. E. of Denver lb. .37 - —

ACIDS

Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls. ..... lb. .50 - .55
Acrolein, tech., dms., c.l., works. lb. .51 - —
dms., l.c.l. works..... lb. .51¾- —
tanks, works ..... lb. .46 - —
Acrylamide, dms., t.l., f.o.b. works. lb. .58 - —
dms., l.t.l., same basis..... lb. .60 - —
Acrylic acid, glacial, dms., c.l., t.l., frt. alld. lb. .57 - —
dms., l.c.l., l.t.l., frt. alld ... lb. .58 - —
Acrylonitrile, dms., c.l., t.l., frt. equald lb. .26 - —
dms., l.c.l., l.t.l., frt. alld..... lb. .27 - —
tanks, frt. equald..... lb. .23 - —

Abies Siberica Oil—Ammonium Bicarbonate

Adeps lanae (see lanolin).
Adipic acid, bgs., c.l., dlvd..... lb. .32¼- —
bgs., l.c.l., dlvd..... lb. .33 - —
Agar, USP, Kobe No. 1, strip, bls. lb. 2.40 - 2.50
powd., 30 mesh., fib., dms lb. 2.40 - —
dl-Alanine, dms., 100-lbs. or more, f.o.b. works lb. 5.25 - —
dms., 1-99 lbs., same basis .. lb.10.00 - —
Aldol, 95%, dms., l.c.l., works lb. .28 - —
Aldrin, tech., fib. dms., c.l., t.l. dlvd lb. .99 - —
fib. dms., l.c.l., dlvd..... lb. 1.04 - —

ALCOHOLS

Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aletris root, bgs..... lb. 1.50 - 1.75
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. E. of Rockies lb. 2.38 - —
Alkali blue, toner, litho flushed, 125-lb. bbls., same basis, lb. 1.35 - —
Alkali blue prices 1c. higher W. of Rockies.
Allethrin, 90%, dms., frt.' alld lb.28.80 -28.90
Soln., 20%, dms., 200-2,000 lb. lots, frt. alld lb. 6.50 - 6.55
2½% dms. frt alld. ..... lb. .95 - 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l. dlvd..... lb. .32½- —
dms., l.c.l., dlvd..... lb. .34 - —
tanks, dlvd. ..... lb. .30 - —
Allyl bromide 55-lb. cbys. 5,005 lbs. or more, works lb. 1.47 - —
55-lb. cbys., 1,045 to 4,950 lbs., works lb. 1.52 - —
55-lb. cbys., 55 to 990 lbs. works, lb. 1.57 - —
Allyl chloride, dms., c.l., dlvd .... lb. .17½- —
dms., l.c.l., dlvd..... lb. .19 - —
tanks, dlvd. ..... lb. .15 - —
Allyl isothiocyanate (see Mustard Oil, syn.).
Almond oil, artif., bitter (see Benzaldehyde)
Almond oil, nat., bitter, f.p.a., bots. lb. 2.75 - 3.45
NF, bots. ..... lb. 3.00 - 3.30
sweet, USP, cns., dms ..... lb. .70 - 1.30

Abbreviations

Used in OPD Market Quotations

alld.	allowed	distr.	distributor	No.	number
amorph.	amorphous	djns.	demijohns	nom.	nominal
AMP	American melting point	dlvd.	delivered	o-	ortho
anhyd.	anhydrous	dms.	drums	ord.	ordinary
AOAC	Association of Official Agricultural Chemists	dom.	domestic	oz.	ounce
		E.	east	p-	para
		e.p.	end point	Pac.	Pacific
a.p.a.	available phosphoric acid	equald.	equalized	pf.	proof
		exp.	expressed	phos.	phosphate
approx.	approximately	Ext.	external	photo.	photographic
artif.	artificial	F.	fahrenheit	pkgs.	packages
ASTM	American Society for Testing Materials	ferment.	fermentation	powd.	powdered
		f.f.a.	free fatty acid	precip.	precipitated
		f.f.c.	free from chlorine	prod.	producer
Atl.	Atlantic	fib.	fiber	pt.	point
Be.	Baume	f.o.b.	free on board	pulv.	pulverized
bbls.	barrels	f.p.a.	free of prussic acid	purif.	purified
bgs.	bags	frt.	freight	redist.	redistilled
bls.	bales	gal.	gallon	refd.	refined
bots.	bottles	gran.	granular	refy.	refinery
b.p.	boiling point	grd.	ground	reg.	regular.
b.p.l.	bone phosphate of lime	i.&a.	iron and aluminum	resub.	resublimed
		i.b.p.	initial boiling point	ret.	returnable
b.r.	boiling range	imp.	imported	SD	specially denatured
bxs.	boxes	incl.	included	s.d.	single distilled
C.	centigrade	indust.	industrial	S E.	southeast
cbys.	carboys	kgs.	kegs	sec.	secondary
CD	completely denatured	l-	laevo	secs.	seconds
		lacq.	lacquer	s.g.	specific gravity
c.i.f.	cost, insurance, freight	lb.	pound	shipt.	shipment
		l.c.l.	less carlots	soln.	solution
cks.	casks	l.t.l.	less truckload	s.u.	standard unit
c.l.	carlots	liq.	liquid	syn.	synthetic
cns.	cans	mfrs.	manufacturers	tanks.	railroad tankcars
coml.	commercial	m-	meta	tech.	technical
conc.	concentrated	m.a.p.	mixed aniline point	tert-	tertiary
CP	chemically pure			t.l.	truckloads
cps.	centipoises	min.	minimum	t.w.	tankwagons
cryst.	crystalline	m.p.	melting point	USP	U. S. Pharmacopoeia
cs.	cases	N-	nitrogen		
ctns.	cartons	n-	normal	vis.	viscosity
cyls.	cylinders	nat.	natural	VM&P	varnish makers & painters
d-	dextro	neut.	neutral		
dbl.	double	NF	National Formulary	W.	west
denat.	denatured			whse.	warehouse
dest-dist.	destructively—distilled	NNR	New and Nonofficial Remedies	w.w.	water-white
dl-	dextro-laevo				
dist.	distilled				

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Aloe, Cape cs ..... lb. .30 - .35
powd., cs. ..... lb. .60 - .65
Curacao, kgs. ..... lb. .60 - .70
powd., kgs. ..... lb. .50 - —
Aloin, USP, bbls., dms., kgs.... lb. 3.25 - 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpinol (see a-Terpinol).
Alphatocopherol (see a-Tocopherol).
Alum ammonium, gran., bgs., works ..100 lbs. 4.30 - —
Lump, dms., works .....100 lbs. 5.05 - —
Powd., dms., works .....100 lbs. 5.20 - —
USP, burnt., dms ..... lb. .20 - .21
hydrous, dms ..... lb. .07¾- .08
Alum potassium, gran., bgs., works. 100 lbs. 4.55 - —
Lump, dms., works .....100 lbs. 5.30 - —
Powd., dms., works .....100 lbs. 5.45 - —
USP, burnt., dms ..... lb. .20 - .21
USP, hydrous, dms ..... lb. .07¾- .08
Alum, potash-chrome, dms ..... lb. .17 - —
Alumina, calcined, bgs., c.l., works. lb. .05¼- —
bgs., l.c.l., works ..... lb. .05½- .08¼
Aluminum acetate, basic soln., 24%, bbls., l.c.l, works lb. .14 - —
Aluminum chloride, coml., anhyd., dms., c.l., works, frt. equald lb. .16 - —
dms., l.c.l., works ..... lb. .16½- —
cryst., dms., c.l., works .100 lbs.21.00 - —
dms., l.c.l., works .....100 lbs.21.50 - —
Soln., 32° cbys., c.l., works ... lb. .0495- —
cbys., l.c.l., works..... lb. .0570- .1095
tanks, works .....100 lbs. 3.95 - —
NF, gran., dms., works ..... lb. .31 - .32
Aluminum fluoride, tech., anhyd., bgs., c.l., works lb. .16¼- —
bgs., l.c.l., works ..... lb. .17¼- .19¼
bulk, c.l., basis 80% ..... lb. .14½- —
Aluminum fluoride in fib. dms. 0.35c per lb. higher
Aluminum formate, basic soln., containers extra, c.l., works. 100 lbs.11.00 - —
containers extra, l.c.l., works. 100 lbs.11.50 - —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .0365- —
bgs., 20,000-40,000 lb. lots, same basis lb. .039 - —
bgs., 2,000-20,000 lb. lots, same basis lb. .049 - —
bulk, c.l., same basis ..... lb. .03¼- —
Aluminum hydroxide, dried, USP XV, fib. dms., works lb. .82½- —
fib. dms., contract, works lb. .79½- —
Aluminum hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib dms., works lb. .22 - —
9-9½% Al_2O_3, fib. dms., works. lb. .19 - —
fib. dms., contract, works lb. .18 - —
Aluminum hydroxide, tech., powd., (see Aluminum hydrate).
Aluminum metal, 99½% + 30-lb. ingots, 10,000-lb. lots, frt. alld lb. .2810- —
50-lb. pigs, 10,000-lb. lots, frt alld. lb. .26 - —
Aluminum oxide, amorphous (see Alumina, calcined).
Aluminum paste, lining, extra-fine, dms lb. .71 - —
Standard grade, dms ..... lb. .48½- —
Aluminum powder, lining, extra-fine, dms lb. 1.13 - —
Standard grade, dms ..... lb. .83 - —
Aluminum paste and powder prices are f.o.b. shipping point. Add 1c. per lb. for 100-lb. dm., 1½c. per lb. for 50-lb. dm., 3c. per lb. for 10 lb. can and 5c. to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs. 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S., a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or more.
Aluminum resinate, precip., 3.4% Al, dms lb. .40¼- —
Aluminum stearate, dibasic, ctns., c.l. lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Monobasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Tribasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Aluminum sulfate, coml., grd., bgs. c.l., works, frt. equald ton.41.00 - —
bulk, c.l., same basis ..... ton.40.00 - —
lump, bgs., c.l., same basis ton.44.00 - —
iron-free, bgs., c.l., works, frt. equald..100 lbs. 3.80 - —
bgs., l.c.l., works, frt. equald. 100 lbs. 4.30 - 8.30
USP, gran., 400-lb. dm., works. lb. .30 - —
USP, powd., dms., works ..... lb. .27 - —
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots ..... oz. 6.50 -10.00
P-Aminoacetanilide, tech., paste, dms., frt. alld. lb. 1.57 - —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.50 - 1.75
Aminoazotoluene base, bbls., 100% basis lb. 1.03 - 1.18
p-Aminobenzoic acid, tech., dry, dms., works lb. 1.72 - —
2-Amino-4-chlorophenol, tech., solid, dms., frt. alld lb. 8.10 - —
p-Aminodiphenylamine, tech., solid, dms., frt. alld lb. 3.00 - —
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 - —
dms., l.c.l., dlvd ..... lb. .49 - —
tanks, dlvd. ..... lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —
dms., l.c.l., frt. alld..... lb. .45 - —
tanks, frt. alld. ..... lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
dms., smaller lots. ..... lbs. 2.50 - —
p-Aminophenol, dms., frt. alld. lb. 1.15 - —
Aminophylline, USP, 100-lb. dm., frt. alld lb. 3.25 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.40 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald. E. of Rockies ..ton.88.00 - —
refrigeration, tanks, works, frt. equald. E. of Rockies ..ton.90.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis, E. of Rockies. ton.91.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal., gray, bgs., c.l., works, frt. equald..100 lbs. 8.25 - —
bgs., l.c.l., same basis..100 lbs. 8.65 -12.65
Ammoniac, sal., white (see Ammonium chloride, tech.)
Ammonium acetate, purif., dms lb. .40 - —
Ammonium benzoate, USP, fib. dms. ton lots, works lb. 1.00 - —
fib dms. 1,000-lb. lots, works. lb. 1.05 - —
Ammonium biborate, gran., dms., c.l., works ton.325 - —
dms., ton lots, ex whse. 100 lbs.20.40 - —
dms., smaller lots, ex whse. 100 lbs.21.15 - —
Ammonium bicarbonate, dom., dms., c.l., works..100 lbs. 7.00 - —
dms., l.c.l., works.....100 lbs. 9.00 - —

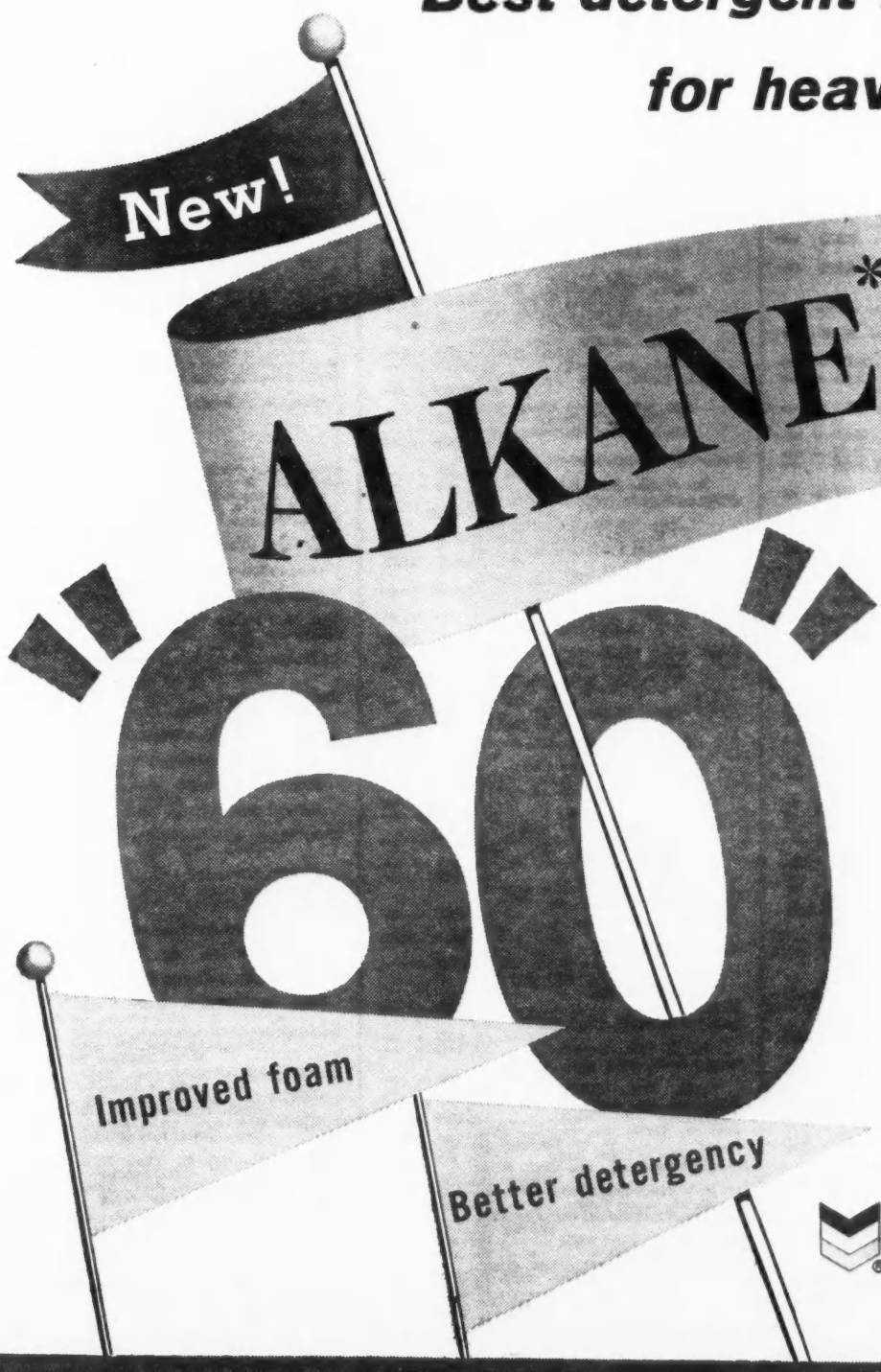
Ammonium bichromate, dms., works lb. .42 - .43
Ammonium bifluoride, dms., divd lb. .2145- .2245
Ammonium bromide, NF, gran., dms., c.l., t.l., frt. equald lb. .44 - —
dms., l.c.l., same basis lb. .46 - —
Ammonium carbonate, USP, lump, dms., c.l. lb. .15½- —
Ammonium chloride, white, tech., fine gran., bgs., c.l., works, 100 lbs. 5.75 - —
bgs., l.c.l., works 100 lbs. 7.75 - 8.20
USP, gran., 250-lb. dm lb. .17¼- —
Ammonium citrate, dibasic, 250-lb. dm, f.o.b. works lb. .77 - —
Ammonium dichromate (see Ammonium bichromate)
Ammonium fluoride (see Ammonium bifluoride)
Ammonium gluconate, tech., 200-lb. dm., f.o.b. works E lb. .45 - —
Ammonium hydroxide (see Ammonia aqeous).
Ammonium iodide, NF, 25-lb. jar, f.o.b. works lb. 4.26 - —
Ammonium lauryl sulfate, dms., c.l., frt. alld lb. .20½- —
dms., l.t.l., frt. alld lb .21½- —
tanks, frt. alld lb. .19½- —
Ammonium lignin sulfonate, bgs., c.l., works 100 lbs. 3.25 - —
bgs., l.c.l., works 100 lbs. 3.40 - 3.65
Ammonium linoleate, 80%, dms., works lb. .50 - .55
Ammonium molybdate, CP, cryst., 400- lb. dms., 15,000-lbs. works. lb. 1.22 - —
400-lb. dms., 2,000-lb. contracts, works lb. 1.23 - —
400-lb. dms., works lb. 1.24 - —
Ammonium nitrate, dom., fertilizer grade, 33.5% N, bgs., f.o.b. works ton.68.00 - —
with dolomite, 20.5% N, bgs., c.l., Hopewell, Va ton.48.00 - —
Imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $3 ton base price ton.68.00 - —

Ammonium oxalate, tech., fine gran., 250-lb. dm., f.o.b. works E lb. .21¼- —
Tech., powd., 200-lb. dm., same basis lb. .28½- —
Ammonium pentaborate, gran., bgs., c.l., works ton.193.00 - —
bgs., ton lots, ex whse 100 lbs.14.23 - —
bgs., smaller lots, ex whse. 100 lbs.15.48 -17.48
Ammonium pentaborate powder $10 per ton higher in bags.
Ammonium persulfate, tech., dms., 10-ton lots or more, works lb. .18 - —
dms., smaller lots, works lb. .20 - .23
Ammonium phosphate, coml., bgs., c.l., works, frt. equald lb. .09¼- —
bgs., l.c.l., same basis lb. .10 - —
Dibasic, NF, V, bbls., dms lb. .46 - —
Dibasic, tech., bgs., c.l., works, frt. alld lb. .09¼- —
Ammonium silicofluoride, dms., works lb. .12¼- .13¾
Ammonium sulfamate, bgs., c.l., t.l., works lb. .19 - —
bgs., l.c.l., works lb. .20½- .27
Ammonium sulfate, standard granular, bulk, f.o.b. works, base price ton.32.00 - —
Ammonium sulfate, standard, gran., purif., c.l., 100-lb. bgs., f.o.b. works lb. .08½- —
Large granular, bulk, c.l., works. ton.35.00 - —
bgs., c.l., works ton.40.00 - —
Tech., bulk, c.l., t.l., works ton.52.00 - —
bgs., c.l., t.l., works ton.56.00 - —
bgs., l.c.l., l.t.l., works 100 lbs. 3.20 - 5.20
Ammonium sulfide, liq., 40-44%, tanks, frt. equald., 100% basis. ton.160.00 - —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate).
Ammonium thiocyanate, tech., cryst., dms., c.l., works lb. .20 - —
dms., l.c.l., works lb. .22 - .26
Tech. soln., 50%, tanks, frt. equald., basis ammonium thiocyanate content lb. .17¼- —

Ammonium thioglycolate, coml., 55-gal. dms., ton lots, 100% basis lb. 1.15 - —
d-Amphetamine hydrochloride, monobasic, dms lb.17.50 -23.50
dl-Amphetamine hydrochloride, dibasic, dms lb. 4.50 - 6.00
d-Amphetamine phosphate, fib. dms., 100-lb. lots lb.15.00 - —
dl-Amphetamine phosphate, dms.lb. 4.20 - 5.60
d-Amphetamine sulfate, fib. dms. lb.15.00 -17.00
dl-Amphetamine sulfate, fib. dms., lb. 4.20 - 5.60
Amyl acetate, ex fusel oil, tech., dist., from 125° to 150°C., dms., c.l., frt. alld. E. of Rockies lb. .18½- .19
dms., l.c.l., same basis lb. .20 - .20½
tanks, same basis lb. .16 - .16½
Amyl acetate, ex pentane, reg., dms., c.l., divd lb. .19 - —
dms., l.c.l., divd. lb. .21½- —
tanks, divd. lb. .16½- —
tech., dms., c.l., divd. lb. .17 - —
dms., l.c.l., divd. lb. .18½- —
tanks, divd. lb. .14½- —
Amyl acetate, syn., oxo process, dms., c.l., divd lb. .19 - —
dms., c.l., divd. lb. .20½- —
tanks, divd. lb. .16½- —
Amyl alcohol, ex fusel oil (see Fusel oil refd).
Amyl alcohol, ferment, refd., 128°-132°C., dms., l.c.l., divd lb. .43½- —
refd., ACS grade, dms., l.c.l., divd lb. .45½- —
ex pentane, mixed amyls, dms., c.l., frt. alld. lb. .19 - —
dms., l.c.l., frt. alld lb. .20½- —
tanks, frt. alld. lb. .16½- —

Amyl alcohol, primary, dms., c.l., frt. alld lb. .19¾- .20¼
dms., l.c.l. frt. alld. lb .21¼- .21¾
tanks, frt. alld. lb. .17¼- .17¾
Sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
dms., l.c.l., same basis lb. .20½- —
tanks, same basis lb. .17 - —
Tert-synthetic, dms., c.l., frt. alld. E lb. .17 - —
dms., l.c.l., frt. alld. E. lb. .18½- —
tanks, frt. alld E. lb. .14½- —
Amyl alcohol, 1-pentanol (syn. normal), dms., c.l., works lb. .41½- —
dms., l.c.l., works lb. .43 - —
tanks, works lb. .39½- —
2-pentanol, dms., c.l., works lb. .65 - —
dms., l.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Amyl n-butyrate, dms. lb. 1.00 - 1.25
Amyl cinnamic aldehyde, dms lb 1.70 - 2.20
p-tert Amyl phenol, dms., c.l., works, lb. .26¾- —
dms., l.c.l., works lb. .27¾- —
Amyl salicylate, cns., dms. lb. .73 - 1.08
Amyris oil, dms. lb. 1.65 - 2.05
Anethole, tech., dms. lb. .92 - 1.00
USP, cns., dms. lb. 1.10 - 1.45
Angelica root, bis lb. .85 - .90
Angelica root oil, bots lb.120.00 -140.00
Angelica seed oil, bots lb.120.00 -130.00
Aniline dms., c.l., frt. alld lb. .20 - —
dms., l.c.l., frt. alld. lb. .21 - —
tanks, frt. alld. lb. .18 - —
Aniline oil (see Aniline).
Aniline salt, dms., c.l., t.l., 20,000 lbs. min., frt. alld lb. .33 - —
dms., l.c.l., same basis lb. .35 - —
Anise oil, USP, dms. lb. 1.75 - 3.00

Best detergent raw material for heavy-duty formulations



Oronite's recent product and production achievement provides the detergent industry its best commercial source for a high molecular weight alkylbenzene. And ALKANE "60" can be sulfonated to the same quality as the best dodecylbenzenes. For complete information and technical data on new ALKANE "60" contact the Oronite office nearest you.

IMPROVED FOAM—New ALKANE "60" minimizes the need for foam additives. In dishwashing foam tests results showed the ALKANE "60" based product, without a foam additive, performing as well as dodecylbenzene products which included a foam additive. And in washing machine foam tests ALKANE "60", without a foam additive, performed as well as a typical dodecylbenzene with an additive.

Formulation savings and processing advantages can be obtained by substitution of ALKANE "60" sulfonate for foam additive.

BETTER DETERGENCY—In the Terg-O-Tometer detergency test, ALKANE "60" based heavy-duty detergents proved to be better cleaning agents than dodecylbenzene derived products. The ALKANE "60" based product removed more soil at all concentrations—performed well in both soft and hard water.

PROCESSING—ALKANE "60" can be sulfonated and processed into finished detergents as easily as ALKANE "56", without manufacturing modification. Product results are comparable to the high sulfonation quality obtained with ALKANE "56".

ORONITE CHEMICAL COMPANY
A CALIFORNIA CHEMICAL COMPANY SUBSIDIARY
EXECUTIVE OFFICES - 200 Bush Street, San Francisco 20, California
SALES OFFICES - New York, Boston, Wilmington, Chicago, Cincinnati, Cleveland, Houston, Tulsa, Los Angeles, San Francisco, Seattle
FOREIGN AFFILIATE - California Chemical International, Inc., San Francisco, Geneva, Panama
6959

ORONITE will continue to supply ALKANE "56", the standard of the detergent industry

Anise seed, Mexican, bgs. lb. .16 - —
Spanish, bgs. lb. .16½ - —
Anisic aldehyde, dms lb. 1.50 - 2.20
o-Anisidine, dms., c.l., frt. alld lb. .80 - —
dms., l.c.l., same basis lb. .82 - —
tanks, same basis lb. .78 - —
p-Anisidine, dms., works lb. .97 - —
Anthracene, 90-95%, dms., c.l., t.l. f.o.b., works lb. .42½ - —
dms., l.c.l., minimum shipment 1,000 lbs., same basis lb. .45 - —
Anthranilic acid, 99%, 150-lb. dms., dlvd lb. 1.15 - —
Anthraquinone, 99.5%, bbls., c.l., frt alld lb. .83 - —
bbls., l.c.l., same basis lb. .86 - —
Electrical grade, bbls., l.c.l., same basis lb. 1.10 - —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines, lb. .29 - —
cs., c.l., mines lb. .29½ - —
Antimony oxide, bgs., c.l., frt. alld. lb. .28½ - —
bgs., l.c.l., frt. alld. lb. .28 - —
Prices of antimony oxide are 2% higher west of the Rockies.
Antimony sulfide, approx. 65%, bgs., 10,000-lb. lots, dlvd lb. .23 - —
bgs., smaller lots, dlvd lb. .24 - .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
pails, l.c.l., works lb. .43 - —
Antimony-potassium tartrate, tech., powd., 250-lb., dm., f.o.b. works, E lb. .69½ - —
USP, powd., 250-lb. dm., same basis lb. .74½ - —
Apomorphine hydrochloride, USP, bots., 25-oz. lots oz. 35.60 - —
Apricot kernel oil, USP, dms lb. .55 - .70
Arabic gum, amber sorts, 10 bgs. lb. .27 - —
USP, powd., bbls. lb. .31 - .34
Areca nuts, powd., bbls. lb. .13 - —
Arecoline hydrobromide, NF, bots., tins, 100 oz. or more oz. 4.00 - —
l-Arginine, free base, dms., 10-kilo lots or more kilo. 90.00 - —
l-Arginine glutamate, dms., 10-kilo lots or more kilo. 60.00 - —
l-Arginine monohydrochloride, dms., 10-kilo lots or more kilo. 60.00 - —
Arnica flowers (true Montana), bls. lb. .75 - —
Aromatic petroleum solvents (see Solvent Naphtha, petroleum, aromatic).
Arsenic, crude (95%), bulk, c.l., works lb. .016 - —
bbls., c.l., works lb. .031 - —
Arsenic trioxide, NF, powd., dms., 300-lbs., f.o.b. works lb. .48 - —
Arsenic, white, powd., bbls., c.l., works lb. .04½ - —
bbls., l.c. works lb. .06½ - .07½
Arsenous acid, t ch. (see Arsenic, white).
Arsenous acid, USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb 3.70 - —
Light shades, bbls. lb. 2.85 - —
Asafetida gum, cns lb. .36 - .40
Powd., bbls., dms lb. .75 - .80
Asbestine (see Talc, fibrous, New York).
Asbestos, Canadian crude
6D, c.l. (30 tons), mines ton. 86.00 - —
7D, c.l. (30 tons), mines ton. 75.00 - —
7F, c.l. (30 tons), mines ton. 71.00 - —
7H, c.l. (30 tons), mines ton. 61.00 - —
7K, c.l. (30 tons), mines ton. 50.00 - —
7M, c.l. (30 tons), mines ton. 44.00 - —
7R, c.l. (30 tons), mines ton. 43.00 - —
7RF, c.l. (30 tons), mines ton. 44.00 - —
7T, c.l. (30 tons), mines ton 41.00 - —
7TF, c.l. (30 tons), mines ton. 44.00 - —
Asbestos prices are in Canadian funds; l.c.l. lots $4 per ton higher.
Ascorbic acid, USP, dms., 100-kiles. kilo. 7.35 - —
dms., less than 100-kilos kilo. 7.75 - —
Ash, black (see Barium sulfide).
Asphalt, gilsonite, black jet, bgs., c.l., mines ton. 40.00 - —
ex-whse, N. Y., N. J. ton. 86.50 - —
seconds, 300°-390°F. fusing pt., bgs., c.l., mines ton. 35.00 - —
select, 350°F. fusing pt., bgs., c.l., mines ton. 41.00 - —
270°-295°F. fusing pt., bgs., c.l., mines ton. 40.00 - —
Manjak No. 10 crude, dms., works. lb. .07 - —
Petroleum, cut-back, tanks, tank-wagon, refy gal. .09½ - —
emulsion, tanks, tankwagon, refy. gal. .09½ - —
steam-refd., 50-80 penetration, tanks, tankwagon, refy. ton. 21.00 - —
85-300 penetration, tanks, tank-wagon, refy ton. 20.00 - —
Aspirin (see Acetylsalicylic Acid).
Atropine, NF, tins oz 5.75 7.50
Atropine sulfate USP, bots oz 5.25 5.75
Azelaic acid, bgs., c.l., dlvd. lb. .40 - —
bgs., ton lots, same basis lb. .41 - —

B

Bacitracin, bulk, 1,000,000,000 or more units 50,000 units. .65 - —
less than 1,000,000,000 units. 50,000 units. .70 - —
Balm of Gilead buds, dried, bgs lb. 1.25 - 1.35
Barberry root bark, bgs lb. 1.00 - 1.10
Barbital, NF, 100-lb. dms., f.o.b. works lb. 4.50 - —
Barbital sodium, NF, 100-lb. dms. lb. 4.75 - —
Barium carbonate, precip., bgs., c.l., works ton. 111.50 - —
bgs., smaller lots, works ton. 126.50 - —
Barium chlorate, dms., works lb. .32 - .41
Barium chloride, anhyd., bgs., c.l., works ton. 176.00 - —
bgs., l.c.l., works ton. 196.00 - —
NF, cryst., dms., 400-lbs., works lb. .23 - —
Tech., cryst., bgs., c.l., works, 100 lbs. 7.00 - —
bgs., l.c.l., works 100 lbs. 8.00 - —
Barium chromate, bgs., frt. equald. lb. .38 - —
Barium dioxide (see Barium peroxide).
Barium hydrate, cryst., bgs., c.l., t.l., frt. equald ton. 208.00 - —
bgs., l.c.l., t.l., frt. equald ton. 218.00 - —
Barium monohydrate, 99%, bgs., c.l., frt. equald. 100 lbs. 11.25 - —
bgs., l.c.l., frt. equald 100 lbs. 11.75 - —
Barium monoxide (see Barium oxide).
Barium nitrate, bbls., c.l., t.l., dlvd lb. .16 - —
bbls., l.c.l., t.l., dlvd. lb. .17 - —
Barium oxide, grd., dms., c.l., t.l., frt equald ton. 275.00 - —
dms., l.c.l., t.l., frt. equald ton. 285.00 - —
Barium peroxide, dms., frt. equald. lb .20 - —
Barium stearate, ctns., c.l., frt. alld. lb. .41 - —
ctns., l.c.l, same basis lb. .42 - .46
Barium sulfate, tech. (see Barytes and blanc fixe).
Barium sulfate, X-ray, 100-lb. dm. lb. .19½ - —
Barium sulfide, dms., c.l., works. ton. 100.00 - —
dms., l.c.l., works ton. 110.00 - —
Barytes, southern, off-color, bgs., mines ton. 25.00 - —
95-75%, bgs., mines ton. 25.00 - —
white, water-grd., paper bgs., c.l., St. Louis ton. 55.00 - 55.25
paper bgs., ex whse., New York ton. 79.85 - —
Battery acid, cbys., c.l., works E. 100 lbs. 2.35 - —
cbys, l.c.l., works, E 100 lbs. 2.65 - 10.95
Bauxite, bulk, mines ton. 7.00 - 10.00
Bay oil, NF, Puerto Rican, 50-55%, cns lb. 2.40 - 2.70
55-60%, cns. lb. 2.50 - 3.05
NF, West Indian, 50-55%, cns., dms lb. 2.35 - —
Bayberry wax, bgs lb. .45 - .50
Beeswax, crude, African bgs. lb. .50 - .52
Brazilian, bgs. lb. .55 - .56
Central American, bgs lb. .53 - —
Chilean, bgs. lb. .56 - —
Refd., USP, bleached white, bricks, 100-lb. ctns lb. .69 - .71
white, slabs, 100-lb. ctns lb. .68 - .70
yellow, bricks, 100-lb. ctns lb. .59 - .61
yellow, slabs, 100-lb. ctns lb. .58 - .60
Belladonna leaf, bls. lb. .24 - .26
Belladonna root, bls. lb. .28 - .35
Bentonite, dom, 200 mesh, bgs., c.l., mines ton. 14.00 - —
Imp, Italian, white, high gel., bgs., 5-ton lots, ex whse ton. 95.20 - —
bgs., 1-ton lots, ex whse ton. 99.00 - —
Imp. Italian, white, low gel., bgs., 5-ton lots, ex whse ton. 93.40 - —
bgs., 1-ton lots, ex whse ton. 97.16 - —
Benzal chloride, cbys., works lb. .44 - —
Benzaldehyde, NF, cns. lb. .80 - 1.05
Tech., dms., c.l., t.l. lb. .47 - —
dms., l.c.l. lb. .48 - —
Benzene, pure or nitration, tanks, works:
Bethlehem, Pa gal. .34 - —
Birmingham district gal. .34 - —
Chicago district gal. .34 - —
Cleveland district gal. .34 - —
Geneva, Utah gal. .34 - —
Houston, Tex. gal. .34 - —
Johnstown, Pa. gal. .34 - —
Lackawanna, N. Y. gal. .34 - —
Lone Star, Tex gal. .34 - —
Lorain, Ohio gal. .34 - —
Middletown, Ohio gal. .34 - —
Mennequa, Colo. gal. .34 - —
Philadelphia district gal. .34 - —
Pittsburgh district gal. .34 - —
Sparrows Point, Md. gal. .34 - —
Syracuse, N. Y. gal. .34 - —
Terre Haute, Ind gal. .34 - —
Youngstown, Ohio gal. .34 - —
Benzene hexachloride, 25% and 99% gamma isomer (see Lindane).
Benzene hexachloride, tech., high gamma, bgs., c.l., t.l., consignment, dlvd. gamma-unit. .0075 —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0065- —
Tech., low gamma, bgs., c.l., t.l., consignment, dlvd gamma-unit. .0075- —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0056- —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.19 - —
bbls., l.c.l., same basis lb. 1.21 - —
Benzidine sulfate, tech., bbls., frt. alld., 100% basis lb. 1.21 - —
Benzidine yellow, AAA, bbls., dlvd. lb 2.20 - —
AAOT, bbls., dlvd. lb. 2.55 - —
Lightfast, bbls., dlvd. lb. 3.40 - —
Benzocaine, dms., 100-lbs., frt. alld. lb. 3.25 - —
Benzoic acid, tech., bbls., dms., c.l., t.l., frt., alld lb. .37 - —
bbls., dms., ton lots, same basis lb. .41 - —
bbls., dms., 1,000-lb lots, same basis lb .43 - —
USP, bbls., dms., ton lots lb. .48 - —
bbls., dms., 1,000-lb lots lb. .50 - —

BENZOL

Benzol quotations, both coaltar and petroleum, may be found under Benzene.

Benzoin gum, Sumatra, cs. lb. .32 - —
Benzophenone, dms. lb. 1.40 - 1.65
Benzotriazole, tech., dms., 1,000-lb. lots, works lb. 2.25 - —
Benzotrichloride, cbys., 1,000-lb. lots or more, frt. equald. lb. .21 - —
cbys., smaller lots, frt. equald lb. .23 - —
Benzoyl chloride, cbys., dms., c.l., works, frt. equald lb. .22 - —
cbys., l.c.l., same basis lb .23 - —
tanktrucks, dlvd. Metropolitan area lb. .21 - —
Benzoyl peroxide, purif., fib. dms., 50 to 1,000-lb lots, works lb. .98 - 1.08
Benzyl acetate, t.t.c., cns. dms lb. .58 - .79
Benzyl alcohol, NF, dms. lb. .58 - .80
Tech., dms., dlvd lb. .47½ - .65
Benzyl benzoate, USP, 40-lb. dms lb. .62 - 1.00
Benzyl chloride, tech., cbys., dms., c.l., works, frt. equald lb. .22½ - .25½
cbys., dms., l.c.l., same basis lb. .23½ - .25½
tanktrucks, dlvd. Metropolitan area lb. .21 - —
A 2½c. differential is quoted on benzyl chloride in 5-gal. cbys. in steel dms. prices are ½c. lower.
Benzyl cinnamate, cns. lb 3.30 - 3.60
N-Benzyl-N,N-dimethylamine, 50 dms., frt. alld lb. 1.25 - —
12-49 dms., same basis lb. 1.35 - —
1-11 dms., same basis lb. 1.90 - —
Benzyl formate, cns. lb. 1.85 - 2.10
Benzyl isoeugenol, cns lb 9.25 - —
Benzyl propionate, bots. lb. 1.35 - 1.65
Benzyl salicylate, bots lb. 1.50 - 1.85
Benzylidine acetone, bots. lb. 1.75 - 1.80
Benzylidine chloride (see Benzal chloride).
Berberine bisulfate, cns lb. 56.50 - —
Berberine hydrochloride, bots lb. 56.50 - —
Bergamot oil, nat., NF, Italian, cns. lb. 11.00 - 12.00
Betagammapicoline (see b.g-Picoline).
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).
Betaoxynaphthoic acid (see b-Oxynaphthoic acid).
Betamethylnaphthalene (see Methylnaphthalene).
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphtholamine).
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride, tech.).
Biotin, cryst., bots gram. 10.00 - —
Biphenyl (see Diphenyl).
Birchtar oil, crude, cns lb. 1.50 - 1.90
Rectified, cns. lb 1.75 - 2.00
Bismuth chloride, jars lb 5.11 - —
Bismuth hydroxide, dms lb 4.60 - 4.65
Bismuth metal, bxs., ton lots lb. 2.25 - —
Bismuth nitrate, cryst., 250-lb. dm. lb. 2.25 - —
Bismuth oxychloride, 25-lb. dm., f.o.b. works lb. 4.42 - —
Bismuth subcarbonate, USP, 150-lb. dm lb. 3.70 - —
Bismuth subgallate, NF, 200-lb. dm., f.o.b. works lb. 4.43 - —
Bismuth subiodide, fib dms lb. 5.37 - —
Bismuth subnitrate, NF, 200-lb. dm., f.o.b. works lb. 3.15 - —
Bismuth subsalicylate, USP, 100-lb. dm., f.o.b works lb. 4.25 - —
Bismuth trioxide, 100-lb. dms., f.o.b. works lb. 4.40 - —
Bismuth-ammonium citrate, USP, powd., jars lb. 4.22 - —
Bisphenol-A, bgs., c.l., t.l., single shipt., 70,000-lbs. or more, frt. alld lb. .29½ - —
bgs., c.l., t.l., less than 70,000 lbs., same basis lb. .30 - —
bgs., l.c.l., same basis lb. .31 - —
Blackberry root bark, bls lb. .50 - .55

BLACK PIGMENTS

Black pigment quotations are listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

Blanc fixe, direct process, bgs., c.l., works ton. 145.00 - —
bgs., l.c.l., works ton. 155.00 - —
bgs., l.c.l., New York whse ton. 195.00 - —
Blood, dried, 16-16½% ammonia, bgs., New York unit-ton 5.50 - —
Bloodroot, bls. lb. .90 - 1.00

BLUE PIGMENTS

Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

Blue dyes (see Dyes).
Blue vitriol (see Copper sulfate).
Bois de rose oil, Brazilian, dms lb 2.20 - 2.85
Peruvian, dms. lb. 1.80 - 2.00
BON acid maroons, pure, bbls lb 1.75 - —
Resinated, bbls. lb 1.50 - —
Bone black, dms., l.c.l., frt. alld lb. .2275- .2425
c.l., works lb. .2075- .2225
Pacific coast bone black prices 2c. per lb. higher.
Bonemeal, steamed works, E ton 80.00 - —
Bone phosphate, defluorinated of lime (see Defluorinated phosphate).
Bone phosphate precip. (see Calcium phosphate, tribasic)
Borax, tech., anhyd., 99½%, bgs., c.l., works ton 92.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 7.42 - —
bgs., smaller lots, same basis 100 lbs. 8.67 - 10.67
bulk, c.l., works ton. 83.00 - —
gran., decahydrate, 99½%, bgs., c.l., works ton. 50.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 5.32 - —
bgs., smaller lots, same basis 100 lbs. 6.57 - 8.57
bulk, c.l., works ton. 43.50 - —
gran., pentahydrate, 99½%, bgs., c.l., works ton. 64.50 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 6.05 - —
bgs., smaller lots, same basis 100 lbs. 7.30 - 9.30
bulk, c.l., works ton. 58.00 - —
USP, powd., bgs., c.l., works, ton. 54.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 6.45 - —
bgs., smaller lots, same basis, 100 lbs. 7.70 - 9.70
Bordeaux powder, tribasic, bgs., c.l., dlvd lb. .24 - —
bgs., l.c.l., same basis lb. .26 - —
Boric acid, tech., anhyd., 99.9%, bgs., c.l., works ton. 335.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 19.62 - —
bgs., smaller lots, same basis, 100 lbs. 20.87 - 22.87
cryst., 99.9%, bgs., c.l., works, ton. 163.50 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 11.05 - —
bgs., smaller lots, same basis, 100 lbs. 12.30 - 14.30
Boric acid, tech., cryst., 99.9%, dms., c.l., works ton. 188.50 - —
dms., ton lots, ex whse., New York or Chicago, 100 lbs. 12.30 - —
bgs., smaller lots, same basis 100 lbs. 13.05 - —
gran., 99.9%, bgs., c.l., works, ton. 112.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 8.47 - —
bgs., smaller lots, same basis, ton. 174.25 - —
dms., c.l., works ton. 137.00 - —
dms., ton lots, ex whse, New York or Chicago 100 lbs. 9.72 - —
dms., smaller lots, same basis 100 lbs. 10.47 - —
bulk, c.l., works ton. 106.00 - —
powd., bgs., ton lots, ex whse., New York or Chicago, 100 lbs. 8.85 - —
bgs., smaller lots, same basis 100 lbs. 10.10 - 12.10
Boric acid, powd., dms., smaller lots, same basis 100 lbs. 11.45 - —
USP boric acid $25 per ton higher in bags.
Borneol, cns. lb. 2.75 - —
Boron trichloride, CP, 1,800-lb. cyls., works lb. 1.25 - —
100-lb. cyls., works lb. 1.70 - —
Boron trifluoride, gas, cyls., t.t., works lb. .70 - —
cyls., l.t.l., works lb. .70 - —
Brimstone (see Sulfur).
Broenner's acid, bbls lb. 1.53 - —
Bromine, purif., cs., c.l., t.l., dlvd. E. of Rockies lb. .32 - —
cs., l.c.l., same basis lb. .34 - .39
ret. dms., c.l., t.l., dlvd. E. of Rockies lb. .31 - —
ret. dms., l.c.l., same basis lb. .31 - .34
tanks, same basis lb. .21½ - —
Bromochloromethane, dms., c.l., frt. equald lb. .48 - —
dms., l.c.l., same basis lb. .50 - —
tanks, same basis lb. .47 - —
Bromoform, pharmaceutical grade, 100-lb. cbys lb. 1.80 - 1.90
Bromstyrol, bots. lb. 5.25 - 5.70
Brucine, cns oz. Nominal.
Brucine sulfate, NF, cns. 1.45 - 1.75
Buchu leaves, bbls. lb. .70 - .75

BROWN PIGMENTS

Brown pigment quotations are listed individually. For example, prices on Brown, iron oxide, may be found in the I's under Iron oxide brown.

Butadiene, refd. cyls., c.l., refy lb. .21 - —
cyls., l.c.l., refy. lb. .22 - —
tanks, dlvd. lb. .14½ - —
Butene-1, tanks, works lb .0625- —
Butene-2, tanks, works lb. .0570- —
n-Butyl acetate, ferment, dms., c.l., frt. alld lb. .17 - —
dms., l.c.l., same basis lb. .18½ - —
tanks, same basis lb. .14½ - —
Syn., dms., c.l., dlvd. E lb. .17 - —
dms., l.c.l., same basis lb. .18½ - —
tanks, same basis lb. .14½ - —
sec-Butyl acetate, syn., dms., c.l., dlvd. E lb. .14¾ - —
dms., l.c.l., same basis lb. .16¼ - —
tanks, same basis lb. .12¼ - —
n-Butyl acrylate, dms., c.l. or t.l., straight or mixed frt. alld. E lb. .42½ - —
dms., l.t.l. same basis lb. .43½ - —
tanks, same basis lb. .40 - —
Prices of n-Butyl acrylate are 1c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
n-Butyl alcohol, ferment, dms., c.l., frt. alld lb. .18 - —
dms., l.c.l., frt. alld lb. .19½ - —
tanks, frt. alld. lb. .15½ - —
n-Butyl alcohol, syn., dms., c.l., dlvd lb. .18 - —
dms., l.c.l., frt. alld lb. .19½ - —
tanks, dlvd lb. .15½ - —
Sec-synthetic, dms., c.l., dlvd lb. .15 - —
dms., l.c.l., dlvd. lb. .16½ - —
tanks, dlvd. lb. .12½ - —
n-Butyl alcohol, tert-synthetic, dms., c.l., frt. alld., dlvd E lb. .16 - —
dms., l.c.l., same basis lb. .17½ - —
tanks, same basis lb. .13½ - —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride, dms., c.l., works lb. .37½ - —
dms., l.c.l., works lb. .38¼ - —
n-Butyl ether, dms., c.l., works lb. .35¼ - —
dms., l.c.l., works lb. .36 - —
tanks, works lb. .33¼ - —
Butyl lactate, dms., c.l., frt. alld. E. Rockies lb. .42½ - —
dms., l.c.l., same basis lb. .43½ - —
tanks, same basis lb. .40 - —
Butyl laurate, dms., works lb. .37½ - —
Butyl methacrylate, dms., c.l., t.l., works lb. .55 - —
dms., l.c.l., works lb. .55½ - —
Butyl oleate, refd., dms., l.c.l., works lb. .32 - —
Butyl phenylacetate, dms. lb. 4.50 - 4.60
Butyl phthalate (see Dibutyl phthalate).
Butyl stearate, dms., c.l., frt. alld. E of Mississippi lb. .27¼ - —
dms., l.c.l., same basis lb. .28¼ - —
Butylamine (see Mono-, Di- and Tributylamine).
tert-Butylamine, dms., c.l., t.l., f.o.b. works lb. .47 - —
dms., l.c.l., same basis lb. .47½ - —
tc., t.l., same basis lb. .45 - —
Butylated hydroxyanisole, food grade, dms., dlvd. lb. 4.75 - —
6-tert-Butyl-m-m-cresol (see Mono-tert-butyl-m-cresol).
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).
1,3-Butylene glycol, dms., c.l., t.l., dlvd lb. .20½ - —
dms., l.c.l., t.l.l., f.o.b. works lb. .22 - —
tanks, dlvd lb. .18 - —
p-tert-Butylphenol, bgs., c.l., dlvd., lb. .27½ - —
bgs., l.c.l., works lb. .28½ - —
Butyraldehyde, dms., c.l., dlvd lb. .22 - —
dms., l.c.l., dlvd. lb. .23½ - —
tanks, dlvd. lb. .19½ - —
Butyric acid, 99%, dms., c.l., frt. equald lb. .34 - —
dms., l.c.l., same basis lb. .34½ - —
tanks, same basis lb. .32½ - —
Butyric ether (see Ethyl butyrate).
Butyrolactone, dms., c.l., t.l., works. lb. .40 - —
dms., l.c.l., same basis lb. .43 - —

C

Cacao butter (see Cocoa butter).
Cadmium CP red dark shade, bbls., frt. alld. E. of Rockies lb. 5.55 - —
Light shade, bbls., same basis lb. 4.65 - —
medium shade, bbls., same basis, lb. 5.30 - —
Medium light shade, bbls., same basis lb. 4.90 - —
Orange-red shade, bbls., same basis lb. 4.30 - —
Yellow, all shades, bbls., frt. alld. E. of Rockies lb. 2.85 - —
Cadmium iodide, 25-lb fib dms lb. 6.75 - 7.00
Cadmium metal, ingots or sticks, ton lots, cs., dlvd lb. 1.30 - —
Cadmium-mercury lithopone orange, deep shade, bbls., frt. alld E. of Rockies lb. 1.65 - —
Cadmium-mercury lithopone red, dark shade, bbls., same basis lb. 1.95 - —
Red, light shade, bbls., same basis, lb. 1.72 - —
Red, medium shade, bbls., same basis lb. 1.87 - —
Red, medium light shade, bbls., same basis lb. 1.80 - —
Red, maroon shade, bbls., same basis lb. 2.03 - —
Cadmium-selenide lithopone maroon, bbls., frt. alld E. of Rockies lb. 2.76 - —
Orange, bbls., same basis lb. 1.58 - —
Cadmium-selenide lithopone red, orange-red shade, bbls., same basis lb. 1.72 - —
Red, dark shade, bbls., same basis, lb. 2.56 - —
Red, light shade, bbls., same basis, lb. 1.88 - —
Red, medium shade, bbls., same basis lb. 2.00 - —
Red, medium-light shade, bbls., same basis lb. 2.23 - —
Calmium-selenide lithopone, yellow, all shades, bbls., frt. alld. E of Rockies lb. 1.19 - —
Caffeine, NF, citrated, dms., 100-lb. lots or more lb. 2.70 - —
USP, nat., cryst., anhyd., dms., 100-lb lots or more lb. 2.10 - —
Caffeine, USP, nat., cryst., hydrous, dms., 100-lb. lots or more, lb. 1.96 - —
USP, syn., anhyd., dms., 100-lb. lots or more lb. 2.10 - —
cryst., hydrous, dms., 100-lb. lots or more lb. 1.96 - —
Cajuput oil, native, cns. lb. 1.75 - 2.00
Redist., USP, cns. lb. 1.90 - 2.10
Calamine, USP, dms. lb. .34 - —
Calamus oil, bots. lb. 12.00 - 20.00
Calciferol, cryst., 10-kilo or more lots, works gram. .54 - —
1-10 kilo lots gram. .55 - —
Calciferol, in edible oil (see Viosterol).
Calcium p-aminosalicylate trihydrate, fib. dms., 100 lbs. or more, frt. adjusted lb. 3.10 - —
Calcium arsenate, dealers, bgs., c.l., frt. alld lb. .09 - .09¼
bgs., l.c.l., same basis lb. .10 - .10½
Calcium bromide, NF, jars, 100 lbs. or more lb. .97 - —
Calcium carbide, standard generator size, 600-lb. dms., c.l., dlvd ton. 149.00 - —
Calcium carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton. 10.50 - —

Calcium carbonate, chalk, whiting, 325 mesh, bgs., c.l., works, ton 32.00 -34.00
water-grd., ⅛ to 10 microns, bgs., c.l., works ton 30.00 - —
10 to 20 microns, bgs., c.l., works ton 17.00 -18.00
precip., dense, bgs., c.l., works, ton 30.00 -38.50
bgs., l.c.l., works ton 45.00 -53.50
medium, bgs., c.l., works ton 38.00 - —
bgs., l.c.l., works ton 48.00 -53.00
surface treated, bgs., c.l., works, ton 42.00 -44.00
bgs., l.c.l., works ton 57.00 -59.00
ultrafine, bgs., c.l., works ton 117.50 -167.50
bgs., l.c.l., works ton 137.50 -187.50

Calcium chloride, conc., flake or pellet, 94-97%, paper bgs., c.l., works, frt. equald. ton 39.30 - —
Flake, 77-80%, paper bgs., c.l., works, frt. equald ton 32.00 - —
Liquor, 40%, tanks, frt. equald. ton 12.50 - —
Powd., 77% min., paper bgs., c.l., works, frt. equald ton 37.00 - —
Purif., gran., dms. lb. .27 - —
Solid, 73-75%, dms., c.l., frt. equald ton 29.50 - —
dms., l.c.l., works, frt. equald. ton 36.00 -73.00
USP, gran., dms. lb. .32 - —

Calcium chromate, bgs., dlvd. lb. .37 - —

Calcium cyanide, dms., c.l., dlvd. E. of Rockies lb. .20 - —
dms., l.c.l., same basis lb. .24 - .55

Calcium cyclamate, 100-lb. dms lb. 1.95 - —

Calcium gluconate, USP, AA grade, 100-lb. dm., ton lb. .73½- —
USP, powd., 100-lb. dm., ton lb. .66½- —

Calcium hydride, lump, dms., works, lb. 2.20 - 3.00

Calcium hypochlorite, high test, gran., 45-lb. cs., dlvd. E. of Rockies cs 23.85 -25.60
100-lb. dms., same basis dm 33.30 -36.55

Calcium hypophosphite, dms., 1,000-lb. lots lb. 1.28 - —

Calcium iodide, jars lb. 4.52 - —

Calcium lactate, NF, dms., f.o.b. works lb. .43 - .46

Calcium mandelate, USP, 150-lb. dm., works lb. 3.25 - —

Calcium naphthenate, liq., 4% Ca., dms., frt. equald lb. .30 - —

Calcium pantothenate, USP, jars, 1 kilo or more kilo 35.00 - —

Calcium para-aminosalicylate (see Calcium p-aminosalicylate).

Calcium phenosulfonate, dms. lb. 1.24 - 1.25

Calcium phosphate, dibasic, USP, bgs., c.l., frt. equald 100 lbs. 16.00 - —
Dibasic, feed grade, 18½% P, bgs., c.l., t.l., frt. equald ton 86.00 - —
bgs., c.l., t.l., f.o.b. Texas City works ton 80.50 - —
bgs., l.c.l., frt. equald ton 96.00 - —
Dibasic, feed grade, 21% P., bgs., c.l., t.l., frt. equald ton 97.65 - —
bgs., l.c.l., frt. equald ton 107.65 - —
Prices of calcium phosphate dibasic in bulk $3 per ton less than bgs., c.l., prices.

Calcium phosphate, monobasic, bgs., 10,000-lb. lots, frt. equald. 100 lbs. 7.45 - —
bgs., smaller lots, same basis. 100 lbs. 7.95 - —

Tribasic, NF, precip., bgs., c.l., works, frt. equald 100 lbs. 9.25 - —
bgs., l.c.l., frt. equald. 100 lbs. 10.00 - —

Calcium propionate, any quantity, dms., dlvd. E. of Rockies. lb. .34½- —
Prices W. of Rockies 3c. per lb. more.

Calcium phytate, bgs., 50 lbs. or more, f.o.b. warehouse N. Y. lb. .39 - —

Calcium resinate, precip., dms., ton lots, frt. alld., works lb. .40¼- —

Calcium silicate, hydrated, bgs., c.l., works lb. .06 - —
bgs., l.c.l., works lb. .06½- —

Calcium silicate paint grade (see Wollastonite).

Calcium stearate, ctns., c.l. lb. .39 - —
ctns., l.c.l. lb. .40 - .44

Calcium sulfate (see Gypsum).

Calomel, NF, mild, powd., dms., 100-lbs., f.o.b. works lb. 4.32 - —
NF, mild, precip., dms., 100-lbs., f.o.b. works lb. 5.67 - —

Camphene, 46° m.p., dms. incl., c.l., works lb. .15 - —
dms. incl., l.c.l., same basis lb. .16½- —
tanks, same basis lb. .12½- —

Camphene chlorinated, 67-69% (see Toxaphene).

Camphor, monobromated, NF, dms., kgs lb. 3.63 - 3.70
Nat., USP, powd., cs., 100-lb. lots, lb. .60 - .65
tablets, 1-oz. cs. lb. .85 - .90
Nat., USP, gran., bbls., 2,000-lb. lots lb. .59 - —
Syn., tech., 1 bbl. or more lb. .48 - —
Syn., USP, gran., powd., bbls., 1,000-lb. lots lb. .60 - —
bbls., smaller lots lb. .61 - —
tablets, ctns., 1,000-lb. lots, lb. .85 - —
ctns., 500-lb. lots lb. .86 - —
ctns., smaller lots lb. .87 - —

Camphor oil, sassafrassy, dms. lb. .35 - .55
White, dms. lb. .26 - .50

Cananga oil, native, cns. lb. 5.00 - 6.50
Rectified, cns. lb. 7.25 -10.00

Candelilla wax, crude, bgs. lb. .65 - .66
Refd., pure, bgs. lb. .70 - .71
Powdered Candelilla wax 20 to 100 mesh, 8c. higher.

Cantharides, Chinese, cs. lb. 1.00 - —
powd., bgs. lb. 1.15 - —
Russian, bgs. lb. 2.00 - 2.15
powd., bgs. lb. 2.15 - 2.30

Capric acid, dms lb. .34 - .36½
tanks lb. .31½- —

Caprolactum monomer, bgs., c.l., t.l., f.o.b. works lb. .52 - —
bgs., l.c.l., l.t.l., same basis lb. .57 - —
tanks, same basis lb. .49 - —

Capryl alcohol, 85% dms., c.l., t.l., works lb. .19 - —
dms., l.t.l., same basis lb. .19½- —
tanks, frt. equald. lb. .16½- —
Sec., 92-99%, dms., c.l., f.o.b. works lb. .22 - —
dms., l.c.l., f.o.b. works lb. .23 - —
tanks, f.o.b. works lb. .19½- —

Caprylic acid, dms lb. .34 - .36½
tanks lb. .31½- —

Capsicum (see Pepper red).

Capsicum oil (see Capsicum oleoresin).

Capsicum oleoresin, NF, from dom. pepper, dms lb. 4.00 - —
NF, from African pepper, dms. lb. 4.50 - —

Caraway oil, NF, dms. lb. 3.15 - 3.40

Caraway seed, Danish, bgs. lb. .16 - —
Dutch, bgs. lb. .17½- —
Polish, bgs. lb. .17¼- —

Carbazole, 97%, bbls, ton lots, works lb. 1.05 - —

Carbon black, channel, rubber beads, bulk, c.l., works lb. .08 - —
bgs., c.l., works lb. .08½- —
bgs., l.c.l., works lb. .16½- —

Furnace, fast extruding, bgs., c.l., works lb. .06¾- —
ctns., l.c.l., whse. lb. .13½- —

Carbon black, high abrasion, bulk, c.l., works lb. .07¼- —
bgs., c.l., works lb. .07¾- —
bgs., l.c.l., dlvd. or whse lb. .14½- —

high modulus, bgs., c.l., works, lb. .06¼- —
ctns., l.c.l., whse. lb. .13 - —

semi-reinforcing, bgs., c.l., works lb. .05¾- —
bgs., ctns., l.c.l., whse. lb. .12½- —

pigment, high color beads, ctns., c.l., works lb. .78 - —
ctns., l.c.l., dlvd. or whse lb. .87 - —

medium color, uncompressed, bgs., c.l., works lb. .14 - —
bgs., l.c.l., dlvd. or whse lb. .22½- —

Carbon dioxide, indust., wholesale, bulk, 30,000-2,999,999 lbs., dlvd. Metropolitan areas, E ton 60.00 -115.00
bulk, 3,000,000 lbs. or more, dlvd. Metropolitan areas, E ton 55.00 - —
Solid, bulk, wholesale, works ton 85.00 - —

Carbon disulfide, 55-gal. dms., c.l., works, frt. equald to competitive points lb. .071 - —
55-gal. dms., l.c.l., same basis lb. .086 - .091
5-gal. dms., 30 dms. to c.l., same basis lb. .131 - —
5-gal. dms., less than 30 dms., same basis lb. .161 - —
tanks, dlvd. lb. .0545- —

Carbon tetrachloride, CP, consumers, dms., c.l., frt. alld. lb. .12¾- —
dms., l.c.l., frt. alld. lb. .15¼- —
Tech., consumers, dms., c.l., t.l., frt. alld lb. .11¾- —
dms., l.c.l., l.t.l., frt. alld lb. .14¼- —
tanks, frt alld lb. .10¾- .11¼

Carboxymethyl cellulose (see CMC).

Carbromal, NF, dms., 100-lb lots, works lb. 4.00 - 4.25
dms., smaller lots, works lb. 4.10 - 4.75

Cardamom oil, NF, bots. lb. 39.00 -42.00

Cardamom seed, bleached "A" lb. 3.20 - —
Bleached "B" lb. 3.10 - —
Decorticated Alleppey, cs. lb. 2.30 - —
Guatemala, cs. lb. 3.15 - —
Green, Alleppey, bgs. lb. 2.35 - —
Ceylon, bgs. lb. 2.15 - —

Carmine No. 40, NF, bulk, 100-lb. lots or more, dlvd. lb. 16.80 - —
bulk, smaller lots, dlvd. lb. 16.90 -17.30

Carnauba wax, chalky, bgs., ton lots lb. .70 Nom.
North Country, No. 2, crude, bgs., ton lots lb. .82 - .84
refd., pure, ton lots lb. .86 - .87
North Country, No. 3, Ceara, ton lots lb. .73 - .74
Ceara, refd., pure, bgs., ton lots lb. .83 - .84
North Country, No. 3, Parnahyba, ton lots lb. .74 - .75
Parnahyba, refd., pure, bgs., ton lots lb. .84 - .85

Carnauba wax, North Country, No. 1, Ceara, yellow, bgs., ton lots lb. 1.02 - 1.03
Parnahyba, yellow, bgs., ton lots lb. 1.03 - 1.06
Powdered carnauba wax, 20 to 100 mesh 8c. per lb. higher.

Carotene, tech., 1,350,000 A units per gram tins, 5-10 kilo lots, dlvd. gram. .20½- —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units. .12 - —
USP, microcrystalline in oil, 400,000 A units per gram., dms., dlvd million units. .144 - —

b-Carotene, in vegetable oil, sea., kilo. 240.00 - —
solid suspension, 400,000 A units per gram, cns kilo. 57.60 - —

b-Carotene, liquid in vegetable oil, 500,000 A units per gram, cns kilo. 72.00 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram, cns. lb. 5.00 - 5.40

Carvol, bots. lb. .34 - .36

Cascara sagrada bark, bulk lb. .56 - —

Casein, dom., edible, acid precip., 30 mesh., bgs., 10,000-lb. lots or more, works lb. .64 - —
edible, acid, precip., 80 mesh, bgs., 10,000-lb. lots or more, works lb. .64 - —
Imp., inedible, acid-precip., grd., Argentine, bgs., c.l., ex-dock, Eastern seaports lb. .19¾- .20
New Zealand, bgs., c.l., same basis lb. .24 - —

If you're looking for:

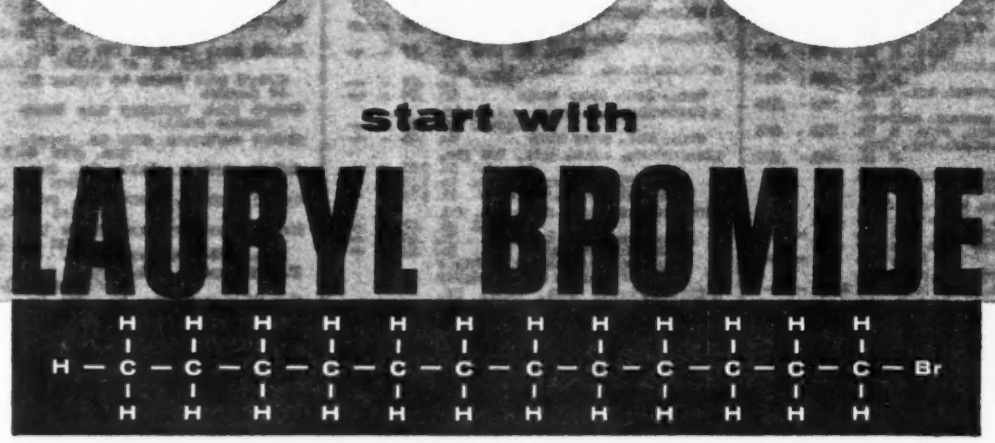
antistatic agents

sanitizers

textile softeners

start with

LAURYL BROMIDE



A practicable intermediate for the synthesis of quaternary ammonium salts with germicidal, cationic, and surfactive properties

INVESTIGATE THESE ADVANTAGES: Michigan Chemical's lauryl bromide contains less than 1% alcohol; is exceptionally light in color (Gardner index: 2 or under) with high clarity. This means negligible color or alcohol carry-over to the end product. Even with these unusual properties this material is offered at standard rather than premium prices. Combine these factors and you have a very interesting intermediate to work with in preparing quaternary ammonium compounds.

Specifically, our lauryl bromide is a mixture of straight chain primary bromides having 10 to 18 carbon atoms with the 12 carbon, or lauryl chain, predominating (approximately 60%). Lauryl bromide will undergo all the reactions possible with normal alkyl halides. In the formation of quaternary ammonium salts and other replacement and exchange reactions, however, the reactivity of the lauryl bromide will be greater than its chlorine analog. This will permit lower reaction temperatures — important when working with materials subject to heat discoloration or decomposition.

Michigan Chemical now offers lauryl bromide, Technical Grade, in large commercial quantities. Write us for samples, technical data, and prices and indicate your area of interest. We will also welcome your inquiry on the custom synthesis of other organic bromides.

Description: Clear, colorless to pale straw-colored mobile liquid with a coconut odor and low volatility.

Grade: Technical. Contains approximately 60% by weight of lauryl bromide with lesser amounts of decyl, myristyl, cetyl, and stearyl bromides. The starting alcohol for this product is derived from a typical coconut oil composition.

Typical Properties:
Molecular weight, calculated 261
Specific gravity, 25/25°C 1.026
Bromine content, % 30.6
Boiling range, 5% to 95%, at 20mm Hg. .....151-208°C.
Freezing point .....—15.5°C.

For complete listing of Michigan Chemical products, see your copy of Chemical Materials Catalog or Chemical Week Buyers Guide.

MICHIGAN CHEMICAL CORPORATION

675 North Bankson Street, Saint Louis, Michigan

EASTERN SALES OFFICE: 230 Park Avenue, New York 17, N.Y.

Copyright 1960 Michigan Chemical Corporation

Cashewnut shell, liquid, treated, dms., c.l., Newark, N. J. lb. .22 - —
dms., ton lots, same basis lb. .23 - —
dms., ton lots, same basis lb. .25 - —
Cassella acid, dms., frt. alld., 100% basis lb 1.44 - 1.75
Cassia oil, redist., USP, cns lb. 7.50 - 9.00
Cassia, Padang, "A," bls. lb. .30 - —
"B," bls. lb. .29 - —
"C," bls. lb. .28 - —
Korintje "A," bls. lb. .34 - —
"B," bls. lb. .30 - —
"C," bls. lb. .30 - —
Castor oil, dom., blown, dms., c.l. lb. .2550- —
dms., l.c.l. lb. .2650- —
Castor oil, dom., dehydrated, bodied, dms., c.l lb. .2700- —
dms., l.c.l. lb. .2850- —
tanks lb. .2500- —
dehydrated, unbodied, dms., c.l. lb. .2500- —
dms., l.c.l. lb. .2660- —
tanks lb. .2360- —
hydrogenated, bgs., c.l. lb. .2450- —
bgs., ton lots lb. .2850- —
bgs., l.c.l., dlvd. lb. .3050- —
No. 1, dms., c.l. lb. .2150- —
dms., l.c.l. lb. .2300- —
tanks lb. .2000- —
No. 3, tech., dms., c.l. lb. .2125- —
dms., c.l., lb. .2225- —
tanks lb. .1925- —
Refd. deod. dms., c.l. lb. .2650- —
dms., l.c.l. lb. .2750- —
tanks lb. .2450- —
USP, dms., c.l. lb. .2350- —
dms., l.c.l lb. .2450- —
tanks lb. .2150- —
Imported, No. 1, Braz., tanks lb. .18½- —
Sulfonated, 50%, dms., works lb. .15 - .15½
75%, dms., works lb. .19 - .19½
Castor oil acids, dehydrated, dms. lb. .44¼- .46¼
Split, dms. lb. .37¼- .38¼
Castor pomace, bgs., c.l., works ton. 35.00 - —
Castoreum nat., cns. lb. 5.25 - —
Syn., cns. lb 9.00 - —
Catechol, CP, cryst., fib., dms., works lb. 2.17½- —
Resub., dms., works lb. 4.29½- —
Catnip leaves, Southern, bls. lb. Nominal.
Caustic potash (see Potash caustic).
Caustic soda (see Soda, caustic).
Cedarleaf oil, USP XIII cns., dms. lb 2.50 - 3.10
Cedarwood oil, cns., dms lb. .75 - .85
Celery seed, French, bgs. lb. .33 - —
Indian, bgs. lb. .19 - —
Cellulose acetate, flake, powd., bgs., t.l., dlvd. E lb. .36 - .51
Cellulose acetate-butyrate, powd., 17% butyryl content, bgs., dlvd. E lb. .545 - .555
27% butyryl content, bgs., dlvd. E lb. .595 - .605
38% butyryl content, bgs., dlvd. E lb. .545 - .555
38% butyryl content, half-second, bgs., dlvd. E lb. .545 - .555
50% butyryl content, bgs., dlvd. E lb. .585 - .595
Cellulose gum, methyl (see Methyl Cellulose).
Cellulose gum, pure, high vis., bgs., 23,000-lb. lots or more works, frt alld lb. .57 - —
bgs., smaller lots, same basis lb. .59 - —
Cerium hydrate 74% CeO, fib. dms., 100-lb. lots or more lb. 1.40 - —
77% CeO, fib. dms., 100-lb. lots or more lb. 1.74 - —
Cerium oxalate (see Rare earth oxalate)
Cerium oxide, optical grade, bgs., 50-lb. lots or more, dlvd. lb. 1.85 - 1.90
bgs., smaller lots, dlvd. lb. 2.15 - —
Cetyl alcohol, NF, fib. cns., c.l., t.l., dlvd. E lb. .41½- —
fib. cns., l.c.l., same basis lb. .43½- —
tanks, same basis lb. .39 — —
Extra, cns., c.l., t.l., dlvd. E lb. .48½- —
fib. cns., l.c.l., same basis lb. .50½- —
tanks, same basis lb. .46 - —
Chalk (see Calcium carbonate).
Chamomile flowers, Hungarian, bls lb. 1.10 - —
Roman, cs. lb. 1.50 - 1.75
Chamomile oil, blue Hungarian, bots lb 350.00 - —
Charcoal, activated, NF, fib. dms., c.l., works lb. .25 - .32
fib. dms., 5-ton lots, works lb. .28½- .32½
fib. dms., smaller lots, works lb. .27 - .50
Charcoal, black (see Charcoal, activated).
Charcoal, bone (see Bone black).
Charcoal, hardwood, lump, bulk, c.l., f.o.b. plant ton. 55.00 - —
briquets, bulk, c.l., f.o.b. plant ton. 78.00 - 80.00
5-lb. paper bgs., c.l., same basis ton. 106.00 - —
25-lb. paper bgs., c.l., f.o.b. plant ton. 87.00 - —
40-lb. paper bgs. c.l., same basis ton. 84.00 - —
Chenopodium oil, NF, cns. lb. 4.15 - 5.00
Chicago acid, paste, bbls., frt. alld. lb. 3.21 - —
Chinawood oil (see Tung oil).
Chloral, tech., 94% min., dms., c.l., works lb. .23 - —
dms., l.c.l., works lb. .24 - —
tanks, multiple units, 5 cars, dms., l.c.l., works lb. .21 - —
Chloral hydrate, USP, jars, 1,000-lb. lots lb. 1.00 - —
jars, 500-lb. lots lb. 1.03 - —
jars, 100-lb. lots or less lb. 1.05 - —
Chlordan, agricultural, dms., c.l., frt. alld lb. .65 - —
dms., l.c.l., 5,000-10,000-lb. lots, frt. alld lb. .66 - —
Clarified, dms., c.l., frt. alld lb. .69 - —
dms., l.c.l., 5,000-10,000-lb. lots, frt. alld lb. .70 - —
Chlorinated paraffin, 42%, dms., c.l., frt. alld lb. .16¾- —
dms., l.c.l., 10 dms. or more, same basis lb. .17¼- —
70%, dms., c.l., same basis lb. .18½- —
dms., l.c.l., 10 dms. or more, same basis lb. .19½- —
Chlorinated rubber, 5, 10, 20 cps., ctns., c.l., works lb. .60 - —
ctns., l.c.l., works lb. .61 - —
125, 1,000 cps., ctns., c.l., works. lb. .70 - —
ctns., l.c.l., works lb. .71 - —

Chlorine, liq., cyls., c.l., works, frt. equald lb. .11 - —
cyls., l.c.l., Metropolitan area lb. .12½- .13¾
tanks, single units, works, frt. equald 100 lbs. 3.25 - —
tanks, multiple units, 5 cars, works, frt. equald 100 lbs. 4.15 - —
tanks, multiple units, 4 cars, same basis 100 lbs. 4.35 - —
tanks, multiple units, 2 cars, same basis 100 lbs. 5.35 - 5.85
tanks, multiple units, 1 car, same basis⅝ 100 lbs. 6.25 - 7.25
Chloroacetic acid, mono, flake, 99%, purif., dms., c.l lb. .23½- .25½
dms., l.c.l. lb. .24½- —
tech., flake, 96-97%, dms., c.l., dms., l.c.l., frt. equald lb. .20 - —
frt. equald lb. .19 - —
2-Chloro-4-aminotoluene, tech., liq., dms., frt. alld lb. 1.03 - —
4-Chloro-2-aminotoluene, fused, bbls. lb. 1.38 - —
6-Chloro-2-aminotoluene, tech., liq., dms., frt. alld lb. .66 - —
m-Chloroaniline, dms., c.l., frt. alld. lb. .75 - —
dms., l.c.l., same basis lb. .77 - —
tanks, same basis lb. .73 - —
o-Chloroaniline, dms., c.l., frt. alld. lb. .52 - —
dms., l.c.l., same basis lb. .54 - —
tanks, same basis lb. .50 - —
p-Chloroaniline, dms., c.l., frt. alld. lb. .77 - —
dms., l.c.l., same basis lb. .79 - —
o-Chlorobenzaldehyde, dms., t.l., works lb 1.05 - —
dms., l.t.l., same basis lb. 1.20 - —
p-Chlorobenzaldehyde, dms., l.c.l., works lb 1.95 - —
o-Chlorobenzoic acid, fib. dms., t.l., works lb. 1.10 - —
fib. dms., smaller lots, works lb. 1.25 - —
p-Chlorobenzoic acid, fib. dms., 2,000-lbs. or more, works. lb. 2.25 - —
fib. dms., less than 2,000-lbs., same basis lb. 2.30 - —
Chloroform, tech., dms., c.l., dlvd. E lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .17 - —
USP, dms., c.l., dlvd. lb. .27 - —
dms., l.c.l., dlvd. lb. .30 - —
tanks, minimum 4,000 gals. dlvd. lb. .25 - —
2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis lb. .81 - —
Powd., dlvd. E., 100% basis lb. .86½- —
4-Chloro-2-nitroaniline, powd., dlvd. E lb. .86 - —
4-Chloro-2-nitrophenol, tech., paste, dms., frt. alld lb. .75 - —
4-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld lb. .99 - —
6-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld lb. .17 - —
o-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms., l.c.l., same basis lb. .38 - —
p-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms., l.c.l., same basis lb. .38 - —
Chloropicrin, coml., cyls., 180 lbs., frt. alld lb. 1.07 - —
cyls., 100 lbs., same basis lb. 1.08 - —
cyls., 50 lbs., same basis lb. 1.14 - —
Chlorosulfonic acid, dms., c.l., frt. equald lb. .0465- —
dms., l.c.l., frt. equald lb. .0515- —
tanks, frt. equald lb. .0415- —
Chlorosulfonic acid, in stainless steel dms.½c. per lb. higher
o-Chlorotoluene, tech., dms., t.l., works lb. .37 - —
dms., l.c.l., t.l., same basis lb. .38 - —
Choline bitartrate, fib. dms., frt. adjusted kilo 2.75 - 3.00
Choline chloride, fib. dms., frt. adjusted kilo. 2.75 - 3.00
Choline dihydrogen citrate, fib. dms., frt. adjusted kilo. 2.75 - 3.00
Chrome green, CP, dark, light, medium blue content, 1-15%, bbls., dlvd. E. of Rockies. lb. .43 - —
blue content, 16-30%, bbls., same basis lb. .44 - —
medium blue content, 41-45%, bbls., same basis lb. .44 - —
blue content, 45-49%, bbls., same basis lb. .45 - —
Reduced color 25%, bbls., same basis lb. .20 - —
Chrome green prices 1c. higher W. of Rockies.
Chrome orange, CP, bbls., dlvd. E of Rockies lb. .35 - —
Chrome orange prices 1c. higher W. of Rockies.
Chrome yellow, CP, bbls., dlvd. E of Rockies lb. .35 - —
Chrome yellow price 1c. higher W. of Rockies.
Chromic acid, 99¾%, dms., c.l., works, frt. equald lb. .29½- —
dms., l.c.l., dlvd. N. Y. Metropolitan area lb. .30 - .31
Chromic acid, NF (see Chromium trioxide).
Chromium acetate, soln., 7½%, dms., 500-2,000-lb. lots, works. lb. .10 - —
Chromium fluoride, bbls., works lb. .51 - .52
Chromium oxide, hydrated, bbls., fib. dms., c.l., frt alld. lb. 1.20 - —
Pure, bgs., c.l., frt. alld lb. .44½- —
bgs., l.c.l., same basis lb. .45¼- —
Chromium trioxide, NF, bots lb. 1.15 - —
Cinchona bark, NF, red, broken, bgs lb .25 - —
NF, yellow broken, bgs lb. .35 - .40
Cinnamic acid, refd., bots lb. 2.50 - 3.50
Cinnamic alcohol, bots lb. 1.75 - 2.20
Cinnamic aldehyde, dms. lb. .80 - 1.00
Cinnamon, Ceylon, No. 2, bgs lb. .57 - —
Ceylon, No. "0000," bgs lb. .76 - —
Cinnamon bark oil, bots lb. 36.00 - 70.00
Cinnamon leaf oil, crude, dms lb. 1.60 - 2.00
USP, (Cassia), cns., dms lb. 8.50 - 13.50
Citral, CP, bots. lb. 3.60 - 4.00
Extra, bots. lb. 3.60 - 5.00
Syn., dms. lb. 7.25 - 7.40
Citric acid, USP, anhyd., fine gran., bgs., dms., c.l lb. .29½- .30
bgs., dms., 10,000-lb. lots, 1 shipt lb. .30 - .30½
bgs., dms., smaller lots lb. .30½- .31
USP, hydrous, fine gran., bgs., dms., c.l lb. .27½- .28
bgs., dms., 10,000-lb. lots, 1 shipt lb. .28 - .28½
bgs., dms., smaller lots lb. .29 - .29½
Powdered citric acid ½c. per lb. higher.
Citronella oil, Ceylon, dms lb. 1.20 - 1.50
Java-type, dms. lb. .85 - 1.00
Citronellal, bots., dms lb. 1.60 - 2.10
Citronellol, bots., dms. lb. 1.90 - 2.50

Citronellol, synthetic, dms lb. 1.70 - —
Civet, artif., bots lb. 13.75 - 15.00
Nat., bots. oz. 8.50 - 15.00
Clay, ball., dom., airfloated, bgs., c.l., Tenn ton. 17.50 - 21.50
crushed shed moisture, bulk, c.l., Tenn ton. 8.00 - 11.00
imp., airfloated, bgs., c.l., Atl. port net-ton. 42.00 - 45.75
lump, bulk, Atl. port net-ton. 29.50 - 35.75
Clay, China, dom., dry-grd., airfloated, 99%, 325 mesh, Georgia, bgs., c.l., works. ton. 10.00 - 12.00
Georgia, bgs., l.c.l., works. ton. 15.50 - —
dom., airfloated, 99%, 300 mesh bgs., c.l., Georgia, works. ton. 13.50 - 14.50
bgs., l.c.l., ex-whse ton. 35.00 - 36.00
imp., white, lump, bulk, c.l. ex-dock, Philadelphia, Portland, Me long-ton 20.00 - 35.00
white, powd., bgs., c.l., ex dock. net-ton. 50.00 - —
bgs., l.c.l., ex whse net-ton. 60.00 - 70.00
Cleaners naphtha, petroleum, 105 F Flash, tankcars, New Jersey and New York gal. 18 - —
Group 3 gal. .12875- —
Houston, Texas gal. .145 - —
140 F Flash, tankcars, New Jersey or New York gal. .205 - —
Group 3 gal. .154 - —
Houston, Texas gal. .17 - —
Cleve's acid, tech., mixed, solid, dms., frt. alld lb. 1.05 - —
1.6, tech., solid, dms., frt. alld lb. .77 - —
1.7, tech., dms., frt. alld lb. 2.20 - —
Cloves, Madagascar, bgs lb. .40½- —
Zanzibar, bgs lb. .42½- —
Clove bud oil, USP, dms lb. 2.70 - 3.60
Clove leaf oil, crude, dms lb. 1.30 - 1.70
CMC, crude, 96.4% low or medium vis., bgs. or fib dms., 23,000 lbs., dlvd. E., 100% basis lb. .41½- —
96.4% low, or medium vis., bgs. or fib. dms., less than 23,000 lbs., dlvd. E., 100% basis lb. .43½- —
65%, low or medium vis., bgs., or fib. dms., c.l., dlvd. E., 100% basis lb. .41½- —
bgs. or fib. dms., l.c.l., dlvd. E., 100% basis lb. .43½- —
purif., high vis. (see Cellulose gum).
CMC, standard low or medium vis., bgs., 23,000 lbs., works, frt. alld lb. .57 - —
bgs., smaller lots, same basis. lb. .59 - —
CMC prices W. of the Rockies are 2c. per lb lower and are on a works basis.
Coaltar, crude, resale for soln., tanks, works gal. .17 - —
Refd., resale, indust., dms., c.l., ex whse gal. .35 - —
dms., l.c.l., ex whse gal. .39 - —
tanks, works gal. .20½- —
Coaltar pitch, aluminum, bulk, works. ton. 44.00 - —
Carbon and indust., bulk, works. ton. 44.00 - —
Core, bulk, works ton. 40.50 - —
Fiber, bulk, works ton. 48.00 - —
Roofing, 140-155 F., Federal Specification RP-381 Type 1, Cobalt acetate, 23.7% Co., dms., dlvd lb. 1.04 - —
Cobalt blue, genuine, 250 lb. bbls., dlvd. E of Rockies lb. 4.90 - —
Cobalt blue prices 1c. higher W. of Rockies
Cobalt blue, imitation (see Ultramarine blue).
Cobalt carbonate, 48% Co., powd., bgs., dlvd lb. 1.45 - —
Cobalt chloride, 24.2% Co., dms., dlvd lb. .93 - —
Cobalt hydrate, 60-61% Co., dms., dlvd lb. 2.05 - —
Cobalt linoleate, fused 8½% Co., dms lb. .71½- —
Liq., 6% Co., dms lb. .57½- —
Cobalt metal, 99% dms., f.o.b. carrier lb. 1.50 - —
Cobalt naphthenate, liq., 6% Co., dms., dlvd lb. .48¾- —
Cobalt nitrate, 20.1% Co., bbls., dlvd, lb. .75 - —
Cobalt oxide, black, ceramic grade, 72½-73½% Co., kgs., dlvd. E. of Mississippi R. lb. 1.15 - —
70-71% Co., kgs., same basis lb. 1.12 - —
Cobalt oxide prices W. of Mississippi R. 3c. per pound higher.
Cobalt phosphate, powd., 32.1% Co., dms., dlvd lb. 1.35 - —
Cobalt resinate, fused, 3% Co., dms. lb. .33½- —
Cobalt sulfate, cryst., 21% Co., dms., dlvd lb. .64 - —
Monohydrated, 33% Co., dms., dlvd lb. 1.09 - —
Cobalt tallate, 6% Co., dms., dlvd. lb. .44 - —
Cocaine, USP, cns., 100-oz. lots, f.o.b. works oz. 17.50 - —
Cocaine hydrochloride, cns., 100-oz. lots, f.o.b. works oz. 13.75 - —
Cocillana bark, bls lb. .18 - .20
Cocoa butter, bgs lb. .56 - .61
Coconut oil, crude, tanks, New York lb. .15½- —
tanks, Pac. coast lb. .13½- —
Refd., deodorized, dms. lb. .23 - .23½
Coconut oil acids, dist., dms. lb. .28¼- .30¾
tanks lb. .25¾- —
Double dist. (stripped), dms lb. .29¼- .33
tanks lb. .26¾- —
Cod oil, dms., spot lb. .08⅜- .08½
Codeine, NF, cns., 100-oz. lots oz. 13.25 - —
Codeine hydrochloride, cns., 100-oz. lots oz. 11.75 - —
Codeine phosphate, USP, cns., 100-oz. lots oz. 10.25 - —
Codeine sulfate, USP, cns., 100-oz. lots oz. 10.75 - —
Codliver oil, USP, dms gal. 1.40 - 1.70
Cohosh root, black, bls lb. .20 - .25
Blue, bls. lb. .20 - .25
Colchicine, USP, bots oz. 29.00 - —
Colchicum root, bls lb. .35 - .45
Colchicum seed, bgs lb. .75 - .80
Collodion, USP, dms lb. .32½- —
USP, flexible, dms lb. .34 - —
Colocynth pulp, bls. lb. .75 - —
Colombo root, bls lb. .16 - .18
Condurango bark, bls lb. .18 - .20
Congo copal gum, No. 1, bgs lb. .25 - .27
No. 2, bgs lb. .22 - .24
No. 3, bgs. lb. .18 - .20
Copaiba balsam, cns., dms lb. .60 - .65
Copaiba oil, cns lb. 1.35 - 2.00
Copper acetate, bbls., c.l., works. lb. .53 - —
bbls., l.c.l., works lb. .54 - —
Copper carbonate, 55%, bgs., c.l., works lb. .3635- —
bgs., l.c.l., works lb. .3785- —
Copper chloride, cupric, anhyd., dms., works lb. .45½- .46
cryst., dihydrate, dms., works. lb. .31 - .31½
cryst., dried, dms., works lb. .39¼- .39¾

Copper chloride, cuprous, dms., works lb. .4135- .4450
Copper cyanide, tech., dms., 20,000-lb. lots or more lb. .609 - —
dms., 1,000-lb. lots or more lb. .619 - —
dms., smaller lots lb. .639 - .65
Copper gluconate, dms lb. 3.20 - —
Copper hydrate, dms., c.l., frt. alld. E. of Miss lb. .53½- —
dms., l.c.l., same basis lb. .54 - —
Copper metal, electrolytic, dlvd. Valley basis lb. .33 - .36
Copper naphthenate, liq., 8% Cu, dms, frt. alld lb. .26½- —
Copper nitrate, tech., cryst., dms., works lb. .30¾ .32¾
Copper oleate, solid, 9% Cu, dms., works lb. .45 - —
Copper oxide, black, bbls., 100-5,000-lb lots, works lb. .49¼- —
Copper oxide, red, 97%, USN Type 1, bbls., 100-5,000-lb. lots. lb. .50½- —
90%, USN Type II, bbls., 100-5,000-lb. lots or more, works. lb. .48½- —
Copper quinolinolate, 18% Cu. dms., ton lots lb. 4.25 - —
10% active quinolinolate, dms lb. 1.14 - 1.15
Copper resinate, precip., dms., frt. alld lb. .41½- —
Copper sulfate, CP, gran., dms., works lb. .1885- —
Cryst., 99%, bgs., c.l., works. 100 lbs. 13.00 - —
bgs., l.c.l., works 100 lbs. 13.25 - 15.75
Monohydrated, 35%, dms., c.l., works 100 lbs. 24.00 - —
dms., l.c.l., works 100 lbs. 24.75 - —
Tribasic, distributors, bgs., c.l., works 100 lbs. 29.60 - —
bgs., l.c.l., works 100 lbs. 31.10 - —
Copper undecylenate, dms lb 2.75 - —
Copra, Atl., Gulf ports, c.i.f. ton. 192.50 - —
Pac. ports, c.i.f. ton. 187.50 - —
Coriander oil, USP, bots. lb. 8.00 - 9.00
Coriander seed, Moroccan, bgs lb. .08 - —
Rumanian, bgs. lb. .07½- —
Yugoslavian, bgs. lb. .08½- —
Corn oil, crude, tanks, works lb. .12¼ - —
Foots (soapstock) acid 95%, tanks, New York lb. .05¼ Nom.
Refd., salad, dms lb. .1798- .1825
tanks lb. .1598- —
Corn oil acids, dist., dms. lb. .15¾- .18¼
tanks lb. .1648- —
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min. 100 lbs. 7.30 - —
paper bgs., l.c.l 100 lbs. 7.45 - —
Corn syrup, 42° Be., non-ret., dms., c.l 100 lbs. 7.31 - —
non-ret., dms., l.c.l 100 lbs. 7.46 - —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, USP, bots., kilo or more gram. 1.05 - 1.75
Costus oil, bots oz. 6.00 - —
Cottonseed meal, 41%, bgs., Memphis ton. 58.00 - —
Cottonseed oil, crude, tanks, South East lb. .10¾ Nom.
tanks, Valley lb. .10⅝- —
tanks, Texas, Lubbock lb. .10¼- —
tanks, Texas, Waco lb. .10¼- —
Foots (soapstock), acid, 95%, tanks, New York lb. .03¾- —
Refd., salad, dms lb. .15⅜- .16
tanks lb. .13⅜- —
Cottonseed oil acids, dist., dms lb. .15¾- .18¼
tanks lb. .13⅜- —
Coumarin, NF, cryst., dms lb. 3.30 - 3.40
Cramp bark, NF, bls lb. .90 1.00
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots., cbys., lb. 3.05 - 3.26
Creosote, coaltar, crude, tanks, works, frt. adjusted gal. .24 - —
Crude, soln. 80%, tanks, works, gal. .226 - —
Refd., dms., c.l., works gal. .50 - —
dms., l.c.l., same basis gal. 62 - —
tanks, same basis gal. .38 - —
West Coast creosote prices computed on a basis of 24c. per gallon for straight oil and 20c. per gallon for coaltar.
Creosote, beechwood, cbys., dms., f.o.b. works, dlvd. in Metropolitan area lb. 1.72 - 1.77
Hardwood, NF, cbys., dms., same basis lb. 1.42 - 1.47
Pinewood, dms., incl., c.l., works, lb. .0561- —
dms., incl., l.c.l., works lb. .0634- —
dms., incl., l.c.l., ex whse, New York lb. .0745- —
tanks, works lb. .0460- —
Creosote oil (see Creosote coaltar).
Cresol, tech., 50% below 204 C., dry above 207 C., wide distillation range, non-ret. dms., c.l., frt. alld lb. .16½- —
non-ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .145 - —
USP, non-ret. dms., c.l., same basis lb. .18 - —
non-ret. dms., l.c.l., same basis, lb. .19 - —
tanks, same basis lb. .16 - —
m-Cresol, 95-98%, dms., c.l., works, lb. .60 - —
dms., l.c.l., works lb. .61 - —
m-p-Cresol, 5-95% 3 C., dms., c.l., frt. equald lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .16 - —
2.97% 2 C., dms., c.l., frt. equald. lb. .22 - —
dms., l.c.l., same basis lb. .23 - —
tanks, same basis lb. .20 - —
o-Cresol, 30.5 C, m.p. and over, ret., dms., c.l., frt. equald lb. .17 - —
ret. dms., l.c.l., same basis lb. .18 - —
tanks, same basis lb. .15 - —
30-30.49 C. m.p., dms., c.l., frt. equald lb. .16½- —
ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .14½- —
o-Cresol, 30.5 C. m.p. and over, ret.
o-Cresol, 29-29.9 C. m.p., dms., c.l., frt. equald lb. .16 - —
ret. dms., l.c.l., same basis lb. .17 - —
tanks, same basis lb. .14 - —
25-28 C. m.p., dms., c.l., frt. equald lb. .15 - —
ret. dms., l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Cresol, 98%, dms., c.l., dlvd lb. .52 - —
dms., l.c.l., dlvd lb. .53 - —
tanks, dlvd. lb. .49 - —
2,3-Cresotic acid, dms., ton lots, works lb. .70 - —
dms., smaller lots, works lb. .72 - —
p-Cresyl methyl ether, cns lb. 1.80 - 2.05
Cresylic acid, coaltar, dom., meta-para content above 25%, resins and tricresyl phosphate grades, dms., c.l., t.l., frt. equald gal. 1.35 - —
dms., l.c.l., same basis gal. 1.40 - —
tanks, same basis gal. 1.15 - —
metapara content 25% or less, dms., c.l., t.l., same basis gal. 1.20 - —
dms., l.c.l., same basis gal. 1.25 - —
tanks, frt. equald gal. 1.00 - —

Cresylic acid, coaltar, imp., meta-para content 25% or less, f.o.b. works, frt. equald, to competitive points, 50 dms. or more. gal. 1.03½ - —
less than 50 dms., same basis gal. 1.05 - 1.15
tanks, same basis gal. 1.00 - —
Crotonaldehyde, 91-93%, dms., l.c.l, works lb. .25 - —
Crotonic acid, dms., 200 lbs. or more, l.c.l., dlvd lb. .36 - —
Cryolite, nat., indust., bgs., c.l., works 100 lbs. 13.00 - —
bgs., l.c.l., works 100 lbs. 14.25 - —
Cube root, powd., 5% rotenone, bgs., t.l., works lb. .21 - —
bgs., l.t.l., works lb. .22 - —
Cubeb berries, NF, bgs lb. 1.00 - —
Powd., cs. lb. 1.15 - —
Cubeb oil, cns lb. 12.00 -16.00
Cumene, dms., c.l., works lb. .12 - —
dms., l.c.l., works lb. .14 - —
tanks, works lb. .11 - —
Cumin seed, Iranian, bgs lb. .30 - —
Moroccan, bgs. lb. .31 - —
Turkish, bgs. lb. .27 - —
Cumin seed oil, bots., cns lb. 15.50 -17.00
Cyanamide, fertilizer, mixing grade, 21% N, gran., bgs., Niagara Falls, Ont., contract. ton. 57.00 - —
Fertilizer, pulv., 21% N. bgs., works unit-ton. 2.85 - —
Indust. grade, bgs., c.l. works. ton. 75.00 - —
bgs., l.c.l., works ton. 96.00 - —
Indust. grade, 6-16 mesh, dms., c.l., works ton. 120.00 - —
dms., l.c.l., works ton. 140.00 - —
Cyclohexane, 99%, tech., dms., c.l., dlvd. E. of Rockies gal. 1.02 - —
dms., l.c.l., same basis gal. 1.10 - —
dms., c.l., dlvd. W. of Rockies gal. .77 - —
dms., l.c.l., same basis gal. .85 - —
tanks, works gal. .55 - —
98%, tech., 40-dm. lots or more, f.o.b. works gal. .56 - —
5-39 dms., same basis gal. .60 - —
tanks, same basis gal. .36 - —
Cyclohexanol, tech., dms., c.l., works, frt. alld. E lb. .28½ - —
dms., l.c.l., works, same basis. lb. .29½ - —
tanks, works, same basis lb. .26 - —
Cyclohexanone, tech., dms., c.l., works lb. .33½ - —
dms., l.c.l., works lb. .34½ - —
tanks, works lb. .31 - —
Cyclohexylamine, dms., c.l., works. lb. .49 - —
dms., l.c.l., works lb. .50 - —
tanks, works lb. 47 - —
Cypress oil, bots. lb. 5.30 - —

D

2,4-D, tech., bgs., dms., c.l., works, frt. equald lb. .40 - —
bgs., dms., l.c.l., same basis lb. .45 - .49
2,4-D butyl ester, dms., c.l., works. lb. .43 - —
dms., l.c.l., same basis lb. .48 - .52
tanks, same basis lb. .42 - —
2,4-D isopropyl ester, dms., c.l., works lb. .43 - —
dms., l.c.l., works lb. .48 - .52
tanks, works lb. .42 - —
Dammar gum, Batavia, A E. cs lb. No stocks.
East India, Batu, bold, bgs lb. .15½ - .18
nubs and chips, bgs. lb. .09 - .10
black, bold, bgs lb. .15½ - .18
nubs and chips, bgs. lb. .12¼ - .13½
unscraped, bgs. lb. .13 - .14½
pale, chips, bgs. lb. .15 - .17
pale, nubs, bgs. lb. .20¾ - .24
Siam, cs. lb. .31½ - .34
Singapore, No. 1, bgs. lb. .34 - .40
No. 2, bgs. lb. .29 - .32
No. 3, bgs. lb. No stocks.
dust, bgs. lb. .18 - .20
Dandelion root, bls lb. .35 - .40
DDD, tech., flake, grd., fib. dms., c.l., works lb. .45 - .47
fib. dms., l.c.l., works lb. .46 - .48
DDT, flake or lump, bgs., c.l., dlvd lb. .23 - —
bgs., smaller lots, same basis. lb. .25 - —
fib. dms., c.l., same basis lb. .24 - —
fib. dms., smaller lots, same basis lb. .26 - —
Powdered DDT 1c. per pound higher.
DDVP (see Dimethyl dichlorovinyl phosphate).
1-Decanol, tech., dms., c.l., dlvd. E. lb. .43½ - —
dms., l.c.l., dlvd. E. lb. .45½ - —
tanks, dlvd. E. lb. .41 - —
Decyl alcohol, mixed isomers, dms., c.l., dlvd lb. .23½ - —
dms., l.c.l., dlvd. lb. .25 - —
tanks, dlvd. lb. .21 - —
Perfume grade, bots. lb. 1.00 - 2.00
Decyl alcohol, normal (see 1-Decanol).
Deertongue leaves, bls lb .55 - .60
Defluorinated phosphate, feed grade, 14% P, paper bgs., c.l., t.l., Tupelo, Miss ton. 57.07 - —
18% P, paper bgs., c.l., works. ton. 66.25 -71.80
19% P, paper bgs., c.l., t.l., works, Houston, Tex ton. 74.35 - —
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices.
Degras, common (15-17% free fatty acid), 400-lb. dms lb. .12 - —
Neutral (over 2% free fatty acid), 400-lb. dms lb. .19 - .23
Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD-17, dms., c.l., dlvd. E. of Rockies. gal. .69½ - —
dms., l.c.l., same basis gal. .74½ - .80½
tanks, dlvd., same basis gal. .53½ - —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, proprietary solvent, dms., c.l., dlvd. E. of Rockies gal. .72 - —
dms., l.c.l., same basis gal. .77 - .83
tanks, same basis gal. .56 - —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, SD1, dms., dlvd E. of Rockies gal. .70½ - —
dms., l.c.l., same basis gal. .75½ - .81½
tanks, same basis gal. .54½ - —
SD2B, dms., c.l., dlvd. E. of Rockies gal. .69 - —
dms., l.c.l., same basis gal. .74 - .80
tanks, same basis gal. .53 - —
SD3A, dms., c.l., dlvd. E. of Rockies gal. .68 - —
dms., l.c.l., same basis gal. .73 - .79
tanks, same basis gal. .52 - —
Denatured alcohol, ethyl, SD23A, dms., c.l., dlvd. E. of Rockies gal. .70½ - —
dms., l.c.l., same basis gal. .75½ - .81½
tanks, same basis gal. .54½ - —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .71 - —
dms., l.c.l., same basis gal. .76 - .82
tanks, same basis gal. .55 - —

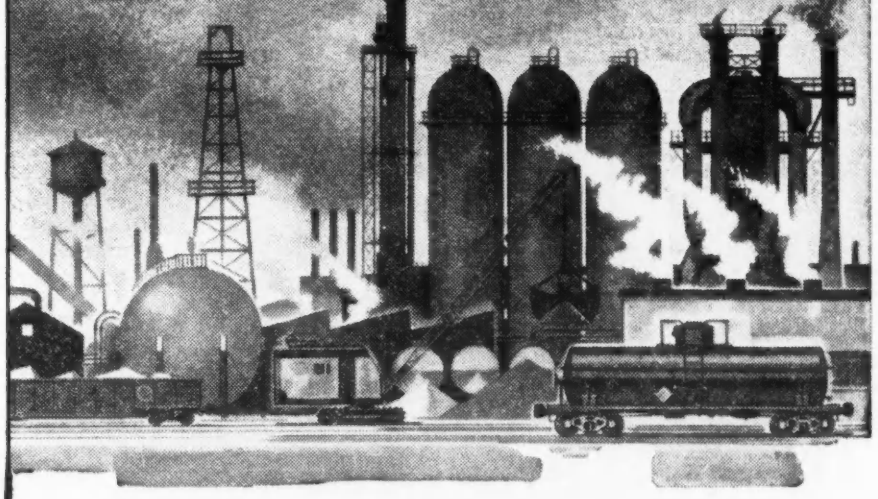
Denatured alcohol, SD29, dms., c.l., dlvd. E. of Rockies gal. .69½ - —
dms., l.c.l., same basis gal. .74½ - .80¼
tanks, same basis gal. .53½ - —
SD30, dms., c.l., dlvd. E. of Rockies gal. .68 - —
dms., l.c.l., same basis gal. .73 - .79
tanks, same basis gal. .52 - —
Denatured alcohol, ethyl, SD-35A, dms., c.l., dlvd. E. of Rockies gal. .71 - —
dms., l.c.l., same basis gal. .76 - .82
tanks, same basis gal. .55 - —
SD-40, dms., c.l., dlvd. E. of Rockies gal. .70½ - —
dms., l.c.l., same basis gal. .75½ - .81½
tanks, same basis gal. .54½ - —
For anhyd. alcohol on above formulas prices are 7c. per gal. higher.
West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c. differential on tankcars is maintained.
d-Desoxyephedrine hydrochloride, dms lb. 13.00 -17.00
dl-Desoxyephedrine hydrochloride, dms lb. 6.50 - —
Dextrin, corn, gum, paper bgs., c.l., 100 lbs. 9.38 - —
paper bgs., l.c.l. 100 lbs. 9.53 - —
canary dark, paper bgs., c.l. 100 lbs. 9.22 - —
paper bgs., l.c.l. 100 lbs. 9.37 - —
Indust. grade, 6-16 mesh, canary light, paper bgs., c.l. 100 lbs. 9.12 - —
paper bgs., l.c.l. 100 lbs. 9.27 - —
white, paper bgs., c.l 100 lbs. 8.96 - —
paper bgs., l.c.l. 100 lbs. 9.11 - —
Corn dextrin in cotton bgs. 15c. per 100 lbs. higher.

Dextrose, anhyd., coml., bgs., c.l. 100 lbs. 8.65 - —
bgs., l.c.l. 100 lbs 8.80 - —
Anhyd., special, aluminum foil lined fib. dms., 200-lb. dms 100 lbs. 14.70 - —
100-lb. dms. 100 lbs. 15.20 - —
Hydrated, coml., bgs., c.l., ex whse 100 lbs. 7.45 - —
bgs., c.l., ex whse 100 lbs. 7.60 - —
USP, dms. lb. 19¾ - —
Diacetyl, flavor grade, bots. lb. 4.30 - 4.55
Di-sec-amyl phenol, dms., c.l., works lb. .32 - —
dms., l.c.l., works lb. .33 - —
tanks, works lb. .29½ - —
Di-tert-amyl phenol, dms., c.l., works lb. .32 - —
dms., l.c.l., works lb. .33 - —
tanks, works lb. .29½ - —
Diacetone alcohol, acetone-free, dms., c.l., dlvd lb. .15½ - —
dms., l.c.l., dlvd. lb. .17 - —
tanks, dlvd. lb. .13 - —
Tech., dms., c.l., dlvd. lb. .15 - —
dms., l.c.l., dlvd. lb. .16½ - —
tanks, dlvd. lb. .12½ - —
Diallylamine, dms., c.l., dlvd. lb. .98½ - —
dms., l.c.l., dlvd. lb 1.00 - —
tanks, dlvd. lb. .96 - —
o-Dianisidine, dry, tech., fib. dms. lb. 2.00 - —
Dibenzyl sebacate, dms., c.l., works. lb. .93 - —
dms., l.c.l., same basis lb. .94 - —
tanks, same basis lb. .91 - —

Dibromobenzene, bgs., 500-lb. lots. lb. .55 - —
2,6-Di-tert-butyl-p-cresol, feed grade, c.l., t.l., dms., dlvd. lb. .65 - —
l.t.l., dms., same basis lb. .68 - —
Food grade, c.l., t.l., dms., dlvd. lb. .65 - —
dms., l.t.l., same basis lb. .68 - 1.10
Tech., dms., c.l., t.l., dlvd. lb. .57 - —
dms., l.c.l., same basis lb. .60 - —
tanks, same basis lb. .54 - —
Dibutyl fumarate, dms., c.l., t.l., dlvd. E lb. .31½ - —
dms., l.c.l., l.t.l., dlvd. E lb. .33 - —
tanks, dlvd E lb. .29 - —
Dibutyl maleate, dms., c.l., t.l., dlvd. E lb. .31½ - —
dms., l.c.l., l.t.l., dlvd. E lb. .33 - —
tanks, dlvd. E lb. .29 - —
Dibutyl phthalate, dms., c.l., dlvd. E lb. .28½ - —
dms., l.c.l., same basis lb. .30 - —
tankcars, tanktrucks, 2,000 gals., same basis lb. .26 - —
tanktrucks, 1,000-1,999 gals., same basis lb. .26½ - —
Dibutyl sebacate, dms., c.l., works. lb. .67½ - —
dms., l.c.l., works lb. .68½ - —
tanks, works lb. .65½ - —
Dibutyl tartrate, dms., works, frt. alld lb. .65½ - —
Dibutylamine, dms., c.l., dlvd lb. .55½ - —
dms., l.c.l., same basis lb. .57 - —
tanks, same basis lb. .53 - —

IS YOUR INDUSTRY LISTED HERE?

Abrasives
Aeronautical
Automotive
Brick and Tile
Ceramic
Cement and Concrete
Cosmetic
Disinfectants
Electrical Manufacturing
Electroplating
Enamel
Engraving and Electrotyping
Feed Stuff, Mineral Feed
Fertilizer
Food
Glass
Insecticide and Fungicide
Laundry
Leather
Lithographing
Linoleum and Floor Covering
Lubricant
Match
Metallurgical
Metal Working
Oil Cloth
Optical
Paint, Varnish and Lacquer
Paper
Petroleum
Pharmaceutical
Photographic
Porcelain Enamel
Plastics
Pottery
Printing Ink
Pyrotechnic
Refractories
Rubber
Shade Cloth
Soaps
Textile
Veterinary Remedies
Welding Electrodes
Wall Paper



HARSHAW CAN SERVE YOU!

Harshaw sells chemicals—thousands of them—for these and many other industries

Here are typical Harshaw chemical products

Electroplating Salts, Anodes and Processes
Organic and Inorganic Dry Colors and Dispersions
Driers and Metal Soaps
Vinyl Stabilizers
Ceramic Opacifiers and Colors
Fluorides
Glycerine
Preformed Catalysts, Catalytic Chemicals
Synthetic Optical Crystals
Agricultural Chemicals
Fungicides
Chemical Commodities

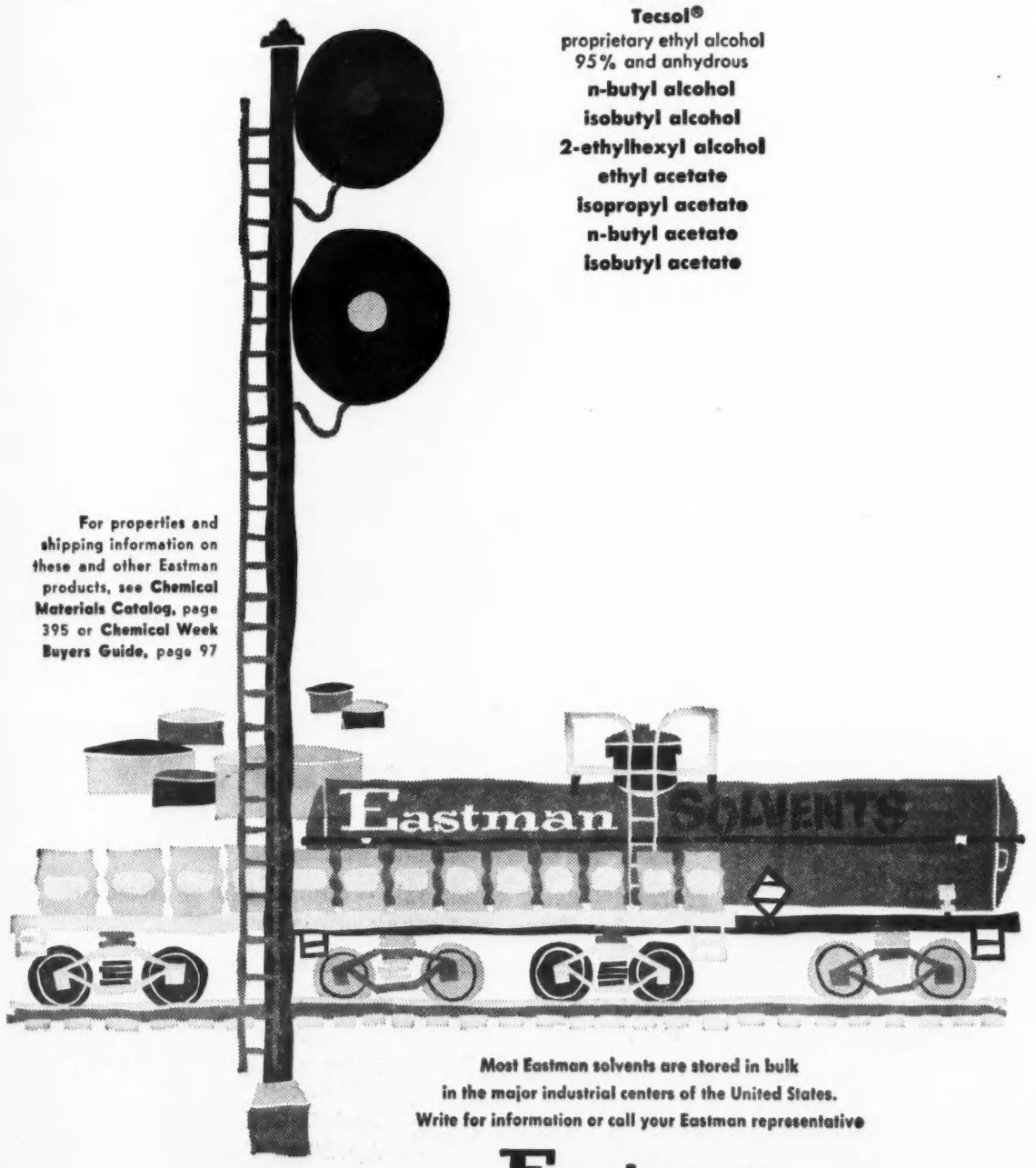
FREE! This 16-page booklet lists the many chemicals available from Harshaw.

WRITE TODAY FOR YOUR COPY

THE HARSHAW CHEMICAL CO.
1945 EAST 97th STREET • CLEVELAND 6 OHIO
Chicago • Cincinnati • Cleveland • Hastings-On-Hudson, N.Y. • Houston • Los Angeles
Detroit • Philadelphia • Pittsburgh

Dicapryl Phthalate—Dioctyl Sebacate

Dicapryl phthalate, dms., c.l., dlvd.	lb.	.27½-	—
dms., l.c.l., dlvd.	lb.	.29 -	—
tanks, dlvd.	lb.	.25 -	—
Dicapryl sebacate, dms., c.l., works.	lb.	.63 -	—
dms., l.c.l., works	lb.	.63½-	.64
tanks, works	lb.	.61 -	—
2,5-Dichloroaniline, dms., works	lb.	.83 -	—
3,4-Dichloroaniline, tech., solid, tanks, frt. alld	lb.	.73 -	—
o-Dichlorobenzene, dms., c.l., frt. alld. E	lb.	.12¾-	—
dms., l.c.l., same basis	lb.	.13¾-	—
tanks, same basis	lb.	.11 -	—
p-Dichlorobenzene, dms., c.l., f.o.b. works, frt. alld. E	lb.	.12 -	—
dms., 2,000 lbs. or more same basis	lb.	.14½-*	—
1,4-Dichlorobutane, dms., c.l., or t.l., works	lb.	.33½-	—
dms., l.c.l., or l.t.l., works	lb.	.34 -	—
tanks, works	lb.	.32 -	—
Dichlorodiphenyltrichloroethane (see DDT).			
2,2-Dichloroethyl ether, dms., c.l., t.l., dlvd. E	lb.	.15½-	—
dms., l.c.l., l.t.l., same basis	lb.	.17 -	—
tanks, same basis	lb.	.13 -	—
Dichloroisocyanuric acid, dms., c.l., t.l., frt. equald	lb.	.65 -	—
dms., l.c.l., same basis	lb.	.75 -	—
Dichloropentanes, dist., dms., c.l., works	lb.	.05 -	—
dms., l.c.l., works	lb.	.06 -	—
tanks, works	lb.	.03 -	—
Dichlorophenoxyacetic acid (see 2,4-D).			
Dicyclohexylamine, dms., c.l., works.	lb.	.54 -	—
dms., l.c.l., works	lb.	.55 -	—
tanks, works	lb.	.52 -	—
Dicyclohexyl phthalate, gran., fib. dms., c.l., works, frt. alld.	lb.	.46½-	—
fib. dms., l.c.l., same basis	lb.	.48 -	—
Dicyclopentadiene, dms., c.l., f.o.b. works	lb.	.14½-	—
dms., l.c.l., same basis	lb.	.14¾-	—
tanks, same basis	lb.	.12 -	—
Didecyl phthalate, dms., c.l., works.	lb.	.28½-	—
dms., l.c.l., same basis	lb.	.30 -	—
tankcars, tanktrucks, 2,000 gals.	lb.	.26 -	—
tanktrucks, 1,000-1,999 gals, same basis	lb.	.26½-	—
Dieldrin, dms., c.l., dlvd.	lb.	1.85 -	—
dms., l.c.l. dlvd.	lb.	1.90 -	—
Diethanolamine, dms., c.l., dlvd. E.	lb.	.27 -	—
dms., l.c.l., same basis	lb.	.28½-	—
tanks, same basis	lb.	.24½-	—
Diethanolamine lauryl sulfate, dms., c.l., frt. alld	lb.	.27½-	—
dms., l.t.l., frt. alld.	lb.	.28½-	—
tanks, frt. alld.	lb.	.26½-	—
Diethyl barbituric acid (see Barbital).			
Diethyl carbonate, dms., c.l., f.o.b. works	lb.	.47½-	—
dms., l.c.l., same basis	lb.	.48½-	—
tanks, same basis	lb.	.45 -	—
Diethyl ethanolamines, dms., c.l., dlvd	lb.	.69¼-	—
dms., l.c.l., dlvd.	lb.	.71 -	—
tanks, dlvd.	lb.	.67 -	—
Diethyl oxalate, dms., c.l., f.o.b. works	lb.	.42½-	—
dms., l.c.l., same basis	lb.	.43½-	—
tanks, same basis	lb.	.40 -	—
Diethyl phthalate, dms., c.l., dlvd.	lb.	.27½-	—
dms., l.c.l., dlvd.	lb.	.29 -	—
tanktrucks, 1,000-1,999 gals, same basis	lb.	.26½-	—
tankcars, tanktrucks, 2,000-lb. lots, same basis	lb.	.26 -	—
Diethyl sulfate, dms., c.l., works	lb.	.19½-	—
dms., l.c.l., works	lb.	.20¼-	—
tanks, works	lb.	.17½-	—
Diethyl thiourea, dms., c.l., t.l., works	lb.	.58 -	—
dms., l.c.l., same basis	lb.	.59 -	—
Diethyl toluamide, 90-95% meta isomer, dms., c.l., t.l., works.	lb.	2.30 -	—
5-44 dm. lots, works	lb.	2.35 -	—
1-4 dm. lots, works	lb.	2.40 -	—
N,N-Diethyl-m-toluidine, tech., liq., tanks, frt. alld	lb.	.83 -	—
Diethylamine, dms., c.l., dlvd. E	lb.	.52 -	—
dms., l.c.l., same basis	lb.	.53½-	—
tanks, same basis	lb.	.49½-	—
N,N-Diethylaniline, dms., c.l., frt. alld	lb.	.57 -	—
dms., l.c.l., same basis	lb.	.58 -	—
tanks, same basis	lb.	.55 -	—
Diethylbenzene, dms., t.l., frt. alld.	lb.	.16½-	—
Di-2-ethylhexyl adipate (see Dioctyl adipate).			
Di-2-ethylhexyl phthalate (see Dioctyl phthalate).			
Diethylene glycol, dms., c.l., dlvd. E.	lb.	.17¾-	—
dms., l.c.l., same basis	lb.	.19¼-	—
tanks, same basis	lb.	.15¼-	—
Diethylene glycol diethyl ether, dms., c.l., works	lb.	.51½-	—
dms., l.c.l., works	lb.	.52¼-	—
Diethylene glycol monobutyl ether, c.l., dms., works	lb.	.30¾-	—
dms., l.c.l., works	lb.	.32¼-	—
tanks, dlvd. E.	lb.	.28¼-	—
Diethylene glycol monobutyl ether acetate, dms., c.l., works.	lb.	.30¾-	—
dms., l.c.l., works	lb.	.31½-	—
tanks, dlvd. E.	lb.	.28¾-	—
Diethylene glycol monoethyl ether, dms., c.l., dlvd	lb.	.22½-	—
dms., l.c.l., dlvd.	lb.	.24 -	—
tanks, dlvd. E.	lb.	.20 -	—
Diethylene glycol monoethyl etner acetate, dms., c.l., works.	lb.	.27¼-	—
dms., l.c.l., works	lb.	.28 -	—
tanks, works	lb.	.25¼-	—
Diethylene glycol monomethyl ether, dms., c.l., dlvd	lb.	.21 -	—
dms., l.c.l., dlvd.	lb.	.22½-	—
tanks, dlvd. E.	lb.	.18½-	—
Diethylenetriamine, dms., c.l., dlvd. E	lb.	.44 -	—
dms., l.c.l., dlvd. E.	lb.	.45½-	—
tanks, dlvd. E.	lb.	.41½-	—
Diethylstilbesterol, USP, bots., 10-kilo lots	kilo.	100.00	-147.50
bots, 1-kilo lot	kilo.	110.00	-152.50
Digitalis leaves, USP, dom., dms	lb.	1.25 -	—
Digitoxin, USP, bots.	gram.	4.20 -	—
Diglycol laurate, dms.	lb.	.32¾-	.34
Diglycol stearate, dms., ton lots	lb.	.26 -	.28
Diglycolic acid, bgs., c.l., t.l., works.	lb.	.15½-	—
bgs., l.c.l., works	lb.	.16 -	—
Dihexyl sebacate, dms., c.l., works.	lb.	.66 -	—
dms., l.c.l., works	lb.	.67 -	—
tanks, works	lb.	.64 -	—
Dihydrazine sulfate, dms., works	lb.	1.10 -	1.25
Dihydrostreptomycin sulfate, bulk.	gram.	.035 -	.036
1,2-Dihydroxy anthraquinone, dms., works	lb.	3.45 -	—
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms	lb.	2.55 -	—
Tech., dms., 20,000 lbs. or more	lb.	1.11 -	—
dms., 1,050 lbs. to 20,000 lbs.	lb.	1.13 -	—
dms., 150 lbs. to 1,050 lbs	lb.	1.15 -	—
Di-isobutyl ketone, dms., c.l., dlvd.	lb.	.17 -	—
dms., l.c.l., dlvd.	lb.	.18½-	—
tanks, dlvd.	lb.	.14½-	—
Di-isobutyl phthalate, dms., c.l., dlvd. E.	lb.	.31½-	—
dms., l.c.l., same basis	lb.	.32½-	—
tanks, same basis	lb.	.29 -	—
Di-isobutylene, dms., c.l., dlvd. E	lb.	.10 -	—
dms., l.c.l., dlvd. E	lb.	.11½-	—
tanks, dlvd. E.	lb.	.08 -	—
Di-iso-octyl phthalate, dms., c.l., dlvd	lb.	.27½-	—
dms., l.c.l., same basis	lb.	.29 -	—
tanktrucks, 1,000-1,999 gals., dlvd.	lb.	.25½-	—
tankcars, tanktrucks, 2,000 gals., dlvd	lb.	.25 -	—
Di-iso-octyl sebacate, dms., c.l., works	lb.	.62 -	—
dms., l.c.l., works	lb.	.62½-	.63
tanks, works	lb.	.60 -	—
Di-isopropanolamine, dms., c.l., dlvd.	lb.	.23¼-	—
dms., l.c.l., same basis	lb.	.24¾-	—
tanks, same basis	lb.	.20¾-	—
Di-isopropylamine dms., c.l., dlvd. E. of Rockies	lb.	.50½-	—
dms., l.c.l., same basis	lb.	.52 -	—
tanks, same basis	lb.	.48 -	—
Dillweed oil, dom., bots., dms	lb.	3.25 -	3.75
Dimethyl anthranilate, cns.	lb.	4.15 -	—
Dimethyl dichlorovinyl phosphate, 55-gal. dms., dlvd	lb.	3.50 -	—
Dimethyl ethanolamines, anhyd., dms., c.l. dlvd	lb.	1.225 -	—
dms., l.c.l., dlvd.	lb.	1.235 -	—
tanks, dlvd.	lb.	1.20 -	—
70% dms., c.l., dlvd., 100% basis, contained amines	lb.	.68½-	—
dms., l.c.l., dlvd., 100% basis.	lb.	.69½-	—
tanks, dlvd., 100% basis	lb.	.66 -	—
Dimethyl hydroquinone, dms.	lb.	1.90 -	2.20
Dimethyl phthalate, dms., c.l., works	lb.	.27½-	—
dms., l.c.l., works	lb.	.29 -	—
tanktrucks, 1,000-1,999 gals., same basis	lb.	.25½-	—
tankcars, tanktrucks, 2,000 gals., same basis	lb.	.25 -	—
Dimethyl sebacate, dms., c.l., works.	lb.	1.31 -	—
dms., l.c.l., works	lb.	1.30 -	—
tanks, works	lb.	1.28 -	—
Dimethyl sulfate, ret. dms., c.l., works	lb.	.17½-	—
ret. dms., l.c.l., works	lb.	.18½-	—
tanks, works	lb.	.16½-	—
Dimethyl sulfide, dms., c.l., works.	lb.	.16½-	—
dms., l.c.l., works	lb.	.17 -	—
tanks, works	lb.	.15 -	—
Dimethylamine, 25% soln., dms., c.l., frt. equald, 100% basis	lb.	.38 -	—
dms., l.c.l., frt. equald, 100% basis	lb.	.38½-	—
tanks, frt. equald, 100% basis.	lb.	.28 -	—
40% soln., dms., c.l., frt. equald, 100% basis	lb.	.35 -	—
dms., l.c.l., frt. equald, 100% basis	lb.	.35½-	—
tanks, frt. equald, 100% basis.	lb.	.28 -	—
N,N-Dimethylaniline, dms., c.l., frt. alld	lb.	.28 -	—
dms., l.c.l., same basis	lb.	.29 -	—
tanks, same basis	lb.	.26 -	—
N,N-Dimethylformamide, dms., c.l., t.l., works	lb.	.32½-	—
dms., l.c.l., works	lb.	.33 -	.34
tanks, works	lb.	.30 -	—
2,4-Dinitroaniline, dms., frt. alld	lb.	.75 -	—
Dinitroaniline orange toner, CP, bbls., dlvd. E. of Rockies.	lb.	1.56 -	—
Dinitroaniline orange toner prices 1c higher W. of Rockies.			
m-Dinitrobenzene, 89°C., dms.	lb.	.26 -	—
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt. alld. E	lb.	.17¼-	—
dms., l.c.l., frt. alld. E.	lb.	.17¾-	—
tanks, frt. alld. E.	lb.	.17 -	—
2,4-Dinitrophenol, bbls.	lb.	.41 -	—
2,4-Dinitrotoluene, oil, dms.	lb.	.11 -	—
Refd., 63°C., dms.	lb.	.23 -	—
Dioctyl adipate, dms., c.l., works	lb.	.42½-	—
dms., l.c.l., works	lb.	.43½-	—
tanks, works	lb.	.40 -	—
Dioctyl phthalate, dms., c.l., frt. alld	lb.	.27½-	—
dms., l.c.l., frt. alld.	lb.	.29 -	—
tanktrucks, 1,000-1,999 gals., same basis	lb.	.25½-	—
tankcars, tanktrucks, 2,000 gals., same basis	lb.	.25 -	—
Dioctyl sebacate, dms., c.l., works.	lb.	.61¼-	—
dms., l.c.l., works	lb.	.62¼-	—
dms., l.c.l., works	lb.	.62¼	—
tanks, works, dlvd.	lb.	.59¼-	—



For properties and shipping information on these and other Eastman products, see **Chemical Materials Catalog**, page 395 or **Chemical Week Buyers Guide**, page 97

Eastman Solvents

acetone
ethyl alcohol
Tecsol®
proprietary ethyl alcohol
95% and anhydrous
n-butyl alcohol
isobutyl alcohol
2-ethylhexyl alcohol
ethyl acetate
isopropyl acetate
n-butyl acetate
isobutyl acetate

Most Eastman solvents are stored in bulk in the major industrial centers of the United States. Write for information or call your Eastman representative

Eastman
CHEMICAL PRODUCTS, INC.
KINGSPORT, TENNESSEE
subsidiary of Eastman Kodak Company

SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tennessee; Atlanta; Chicago; Cincinnati; Cleveland; Detroit; Framingham, Massachusetts; Greensboro, North Carolina; Houston; New York; Philadelphia; St. Louis. **West Coast: Wilson and Geo. Meyer & Company,** San Francisco; Los Angeles; Portland; Salt Lake City; Seattle.

1,4-Dioxane, dms., c.l., dlvd. E ..lb. .31½ - —
dms., l.c.l., dlvd. E .....lb. .33 - —
tanks, dlvd. E .....lb. .29 - —
Prices in the west are 2c. per lb. higher.
Dipentaerythritol, bgs., c.l., t.l., dlvd. E lb. .40 • —
bgs., l.c.l., l.t.l., dlvd. E .....lb. .41 • —
Dipentene, dest.-dist., dms., c.l., works gal. .58 • —
dms., l.c.l., works .....lb. .62 • —
dms., l.c.l., ex whse. .....gal. .78 • —
tankcars, works .....gal. .41 • —
Steam dist., dms., c.l., works, South gal. .72 • —
dms., l.c.l., dlvd. New York gal. .91 • —
tanks, works, South .....lb. .55 • —
Dip oil (see Tar acid oil).
Diphenolic acid, 1,000-lb. or more, bgs., works lb. .75 • —
Diphenolic polyether acids, 1,000-lb. or more, bgs., works lb. 1.00 • —
Diphenyl, bgs., c.l., t.l., works ...lb. .16¾ - —
bgs., l.c.l., works .....lb. .18½ - —
tanks, works .....lb. .15¾ - —
Diphenyl oxide, perfume grade, cns. lb. .55 - .70
Diphenyl phthalate, dms., c.l., works, lb. .51¾ - —
dms., l.c.l., works .....lb. .55¾ - —
Diphenylamine, refd., flake, bgs., c.l., works, frt. equald lb. .31 • —
bgs., l.c.l., same basis .....lb. .33 • —
Refd., fused, tanks, same basis lb. .23 • —
Refd., diphenylamine in dms., ½c. per lb. higher.
Diphenylguanidine bgs., dms., ton lots, frt. alld lb. .49 • —
bgs., smaller lots frt. alld .....lb. .50 • —
Diphenylhydantoin-sodium, USP, dms lb. 5.00 - 5.60
Dipropylene glycol, dms., c.l., frt. alld lb. .17 • —
dms., l.c.l., frt. alld. .....lb. .18½ - —
tanks, frt. alld. .....lb. .14¼ - —
Dipropylene glycol methyl ether, dms., c.l., dlvd. E lb. .20 • —
dms., l.c.l., same basis .....lb. .21½ - —
tanks, same basis .....lb. .18½ - —
Dithiodibenzoic acid, dms., 1,000-lb. lots, works lb. 1.45 • —
Di-o-tolylguanidine, dms., ton lots, frt. alld lb. .69 • —
dms., smaller lots, frt. alld .....lb. .70 • —
Di-o-tolylthiourea, tech., solid, dms., c.l., t.l., frt. alld lb. .55 • —
Divinylbenzene, 20-25%, dms., c.l., works, frt. equald lb. .20 • —
dms., l.c.l., same basis .....lb. .21 • —
tanks, same basis .....lb. .19 • —
50-60%, dms., c.l., works, 100% basis lb. 1.00 • —
dms., l.c.l., works, 100% basis, lb. 1.05 • —
tanks, same basis .....lb. .90 • —
Dodecenyl succinic anhydride, dms., c.l., t.l., dlvd. E lb. .75 • —
dms. l.c.l., l.t.l., same basis lb. .76 • —
Dodecylbenzene, dms., c.l., f.o.b. works, frt equald lb. .134 • —
dms., l.c.l., same basis .....lb. .144 • —
tanks, same basis .....lb. .11 • —
Dodecylphenol, c.l., frt. alld. .....lb. .22 • —
dms., l.c.l., same basis .....lb. .23 • —
tanks, same basis .....lb. .19½ - —

Dodecylphenol prices on shipments to Western States are 2c. per pound higher.

Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1-lb. lots, dlvd.:

Blue, FD&C, No. 1	lb.	15.65	-17.60
No. 2	lb.	15.65	-17.60
Green, FD&C, No. 1	lb.	15.65	-17.60
No. 2	lb.	19.60	-22.85
No. 3	lb.	31.30	-35.90
Red, FD&C, No. 1	lb.	5.90	- 7.85
No. 2	lb.	3.30	- 4.10
No. 3	lb.	19.60	-22.85
No. 4	lb.	5.55	- 7.50
Violet, FD&C, No. 1	lb.	15.65	-17.60
Yellow, FD&C, No. 1	lb.	9.15	-11.05
No. 5	lb.	3.30	- 4.10
No. 6	lb.	3.30	- 4.10

Dyes, coaltar, certified colors for drugs and cosmetics, 200-lb. and 1-lb. lots, dlvd.:—

Black, D&C, No. 1	lb.	10.50	-10.95
Brown, D&C, No. 1	lb.	15.65	-16.10
Green, D&C, No. 5	lb.	15.65	-16.10
No. 6	lb.	15.65	-16.10
No. 7	lb.	14.35	-14.80
Orange, D&C, No. 3	lb.	10.50	-10.95
No. 4	lb.	19.60	-20.05
No. 5	lb.	3.80	- 4.25
Red, D&C, No. 17	lb.	10.50	-10.95
No. 18	lb.	23.60	-24.00
No. 19	lb.	15.00	-15.45
No. 21	lb.	3.90	- 4.35
No. 22	lb.	10.50	-10.95
No. 28	lb.	24.15	-24.65
No. 33	lb.	17.00	-17.45
Violet, D&C, No. 2	lb.	15.65	-16.10
Yellow, D&C, No. 7	lb.	10.50	-10.95
No. 8	lb.	10.50	-10.95
No. 10	lb.	13.05	-13.50
No. 11	lb.	13.05	-13.50

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb. and 1-lb. lots, dlvd.:—

Blue, Ext., D&C, No. 1	lb.	15.63	-16.10
Green, Ext., D&C, No. 1	lb.	15.65	-16.10
Red, Ext., D&C, No. 1	lb.	13.05	-13.50
Yellow, Ext, D&C, No. 1	lb.	10.50	-10.95

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Color Index scale or prototype), contract dlvd. No.

11110 Brilliant scarlet BN	lb.	1.79	• —
13390 Fast blue SR	lb.	1.43	• —
14025 Yellow 2G	lb.	1.26	• —
14030 Orange R, extra, conc.	lb.	1.64	• —
14645 Chrome black T	lb.	.77	• —
14720 Rubine XX, conc.	lb.	1.59	• —
15510 Orange Y, extra conc.	lb.	.83	• —
15575 Orange RR	lb.	.99	• —
15620 Fast Red A, conc	lb.	1.61	• —
15705 Chrome blue black R, conc.	lb.	1.12	• —
16150 Scarlet 2RL	lb.	1.22	• —
16255 Brilliant scarlet 3RN, conc.	lb.	1.26	• —
16230 Fast light, orange 2G	lb.	1.39	• —
17590 Brown PG	lb.	3.00	• —
18050 Phloxine 2G	lb.	1.05	• —
18055 Fuchsine 6B	lb.	1.55	• —
18965 Fast yellow 2G	lb.	2.32	• —
19140 Yellow XX	lb.	2.48	• —
19555 Yellow NN, conc.	lb.	3.67	• —
20170 Brown Y	lb.	1.33	• —
20470 Blue black, extra, conc.	lb.	1.44	• —
21010 Brown, RX, conc.	lb.	1.35	• —
22240 Scarlet B	lb.	2.81	• —
22310 Red FC	lb.	1.57	• —
22311 Brown MCW	lb.	1.47	• —
22590 Diazo black BHD	lb.	.93	• —
22610 Blue 2B, extra conc.	lb.	1.53	• —
22500 Red, 4BX, conc.	lb.	1.80	• —
24410 Sky blue FF, extra, conc.	lb.	1.95	• —
24895 Brilliant yellow, conc.	lb.	3.27	• —
26360 Navy blue 3R, conc.	lb.	1.84	• —
26695 Black F, conc.	lb.	2.30	• —
26900 Milling Red 3R, conc.	lb.	1.91	• —
27075 Neutral black 2B, conc	lb.	2.75	• —
27720 Gray L	lb.	2.18	• —
29135 Fast scarlet 4BNC	lb.	2.23	• —
30015 Diazo black VJ conc.	lb.	2.48	• —
30045 Yellow brown K, extra	lb.	1.26	• —
30235 Black EB, 200%	lb.	1.33	• —
30295 Green BY, conc.	lb.	1.07	• —
35960 Brown B	lb.	2.89	• —
37565 Naphthol SWF	lb.	1.85	• —
40000 Yellow 2G	lb.	1.44	• —
41000 Yellow OX	lb.	2.45	• —

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour index scale of prototype), contract, dlvd. No.

42000 Green V, crystals	lb.	2.73	• —
42040 Brilliant green G crystals	lb.	3.62	• —
42090 Blue EG	lb.	1.85	• —
42100 Milling green 6B, conc.	lb.	4.78	• —
42640 Violet 4BXN	lb.	2.43	• —
43830 Brilliant blue, BBG	lb.	2.44	• —
44045 Blue B, extra conc.	lb.	3.61	• —
45170 Red BX	lb.	4.76	• —
50415 Nigrosine SSJ	lb.	1.03	• —
52015 Blue GXX	lb.	2.33	• —
53185 Black, GXCF, conc.	lb.	.38	• —
58005 Alizarin red SC	lb.	3.64	• —
59700 Golden orange GFD, single paste	lb.	2.70	• —
59710 Flaming orange 6RD double powder	lb.	4.90	• —
59800 Dark blue BO, single paste,	lb.	2.28	• —
59825 Jade green NC supra, double paste	lb.	1.50	• —
61570 Alizarin green CG extra	lb.	3.81	• —
63010 Alizarin blue SAPG	lb.	3.90	• —
63515 Alizarin blue black B	lb.	3.26	• —
69825 Blue BLFD double paste	lb.	2.32	• —
70300 Brown BR single paste	lb.	2.03	• —

Dyes, coaltar, oil-soluble, 100-lb. drums, dlvd. No.

12140 Oil scarlet BL	lb.	1.87	• —
12055 Oil orange 7078 V	lb.	1.38	• —
26120 Oil red N 1700	lb.	1.94	• —
42535B Methyl violet base	lb.	1.83	• —
44045B Victoria blue base	lb.	4.06	• —
50415B Oil black 3603	lb.	.80	• —
61565 Alizarin cyanine green base,	lb.	6.13	• —
Spirit black RB	lb.	3.89	• —
Spirit brown GN	lb.	5.30	• —
Spirit orange R conc.	lb.	5.87	• —
Spirit red B conc	lb.	6.41	• —
Pr. 517 Spirit yellow 2R conc.	lb.	4.62	• —
Pr. 554 Spirit blue THN	lb.	5.06	• —

E

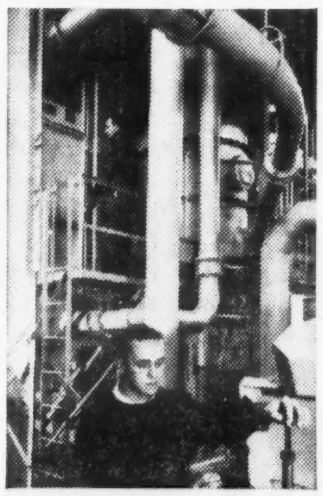
Echinacea root, bls.	lb.	1.25	• —
Elm bark, grinding, bls.	lb.	.30	- .32
Powd., bbls., bxs.	lb.	.50	- .55
Select, bundles	lb.	.75	• —
Emetine hydrochloride, USP, bots.	oz.	48.40	• —
Endrin, tech., dms., 100-lbs. or more, 100% basis, dlvd	lb.	2.70	• —
Eosin red toner, bbls., works	lb.	1.95	• —
Ephedrine, syn., USP, anhyd., bots. 100-oz. lots	oz.	.98	- 1.00
hydrous, bots., 100-oz. lots,	oz.	.92	• —
Ephedrine hydrochloride, NF, dms., 100-oz. f.o.b. works	oz.	.72	• —
Ephedrine sulfate, USP, cryst., dms., 100-oz. f.o.b. works	oz.	.73	• —
USP, powd., dms., 100-oz., same basis	oz.	.73	• —
Epichlorohydrin, dms., c.l., dlvd	lb.	.29½	- —
dms., l.c.l., dlvd.	lb.	.31	• —
tanks, dlvd.	lb.	.27	• —
Epsom salt (see Magnesium sulfate),			
l-Epinephrine base, syn., USP, bots., 100 gram lots	gram	.58	• —
Erigeron oil, ens.	lb.	11.00	• —
Ergot, NF, dms., tin-lined	lb.	1.00	- 1.25
Eserine salicylate, bots.	oz.	44.00	• —
Eserine sulfate, bots.	oz.	86.00	• —

Ester gum, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W. Va lb. .18½ - —
Wood-rosin type, dms., c.l., same basis lb. .18½ - —
Ether (see specific product).
Ethyl acetate, nat., ferment. 85-88%, dms., c.l., dlvd lb. .15 • —
dms., l.c.l., dlvd. .....lb. .16½ - —
tanks, dlvd. .....lb. .12½ - —
95-98%, dms., c.l., dlvd. .lb. .15¼ - —
dms., l.c.l., dlvd. .....lb. .16¾ - —
tanks, dlvd. .....lb. .12¾ - —
Ethyl acetate, nat., ferment. 99%, dms., c.l., dlvd lb. .15½ - —
dms., l.c.l., dlvd. .....lb. .17 • —
tanks, dlvd. .....lb. .13 • —
syn., 85-88%, dms., c.l., dlvd lb. .15 • —
dms., l.c.l., dlvd. .....lb. .16½ - —
tanks, dlvd. .....lb. .12½ - —
Ethyl acetate, syn., 95-98%, dms., c.l., dlvd lb. .15¼ - —
dms., l.c.l., dlvd .....lb. .16¾ - —
tanks, dlvd .....lb. .12¾ - —
99%, dms. c.l., dlvd. .....lb. .15½ - —
dms., l.c.l., dlvd. .....lb. .17 • —
tanks dlvd. .....lb. .13 • —
Ethyl acetoacetate, dms., c.l., dlvd. lb. 58½ - —
dms., l.c.l., dlvd. .....lb. .60 • —
tanks, dlvd .....lb. .56 • —

HOW HERCULES HELPS...

SET A TUNNEL DRIVING RECORD—For New York City's latest water tunnel, a 43.64 mile bore was completed in the record time of 841,000 man-days—ten months ahead of schedule. Clancy O'Dell, project manager, depended on Hercules® short-period electric blasting caps. Pioneering in the field of industrial explosives has always been part of Hercules' history and this extensive background is available through a world-wide staff of explosives technical service men.

IMPROVE CLEANING COMPOUNDS—New type liquid cleansing agents often depend upon Pamak® tall oil fatty acids for added effectiveness. Pamak is just one of the many Hercules products that is a part of today's formulations for modern cleaning compounds and liquid detergents.



PROTECT INDUSTRIAL EQUIPMENT—Protective coatings based on Parlon®, Chlorinated natural rubber, are being used from coast-to-coast. A typical example of the outstanding performance of Parlon coatings is at the Middlesex County Sewage Disposal Center in Sayreville, N. J., where a Parlon-based paint has been selected to protect equipment under extremely challenging conditions.

HERCULES

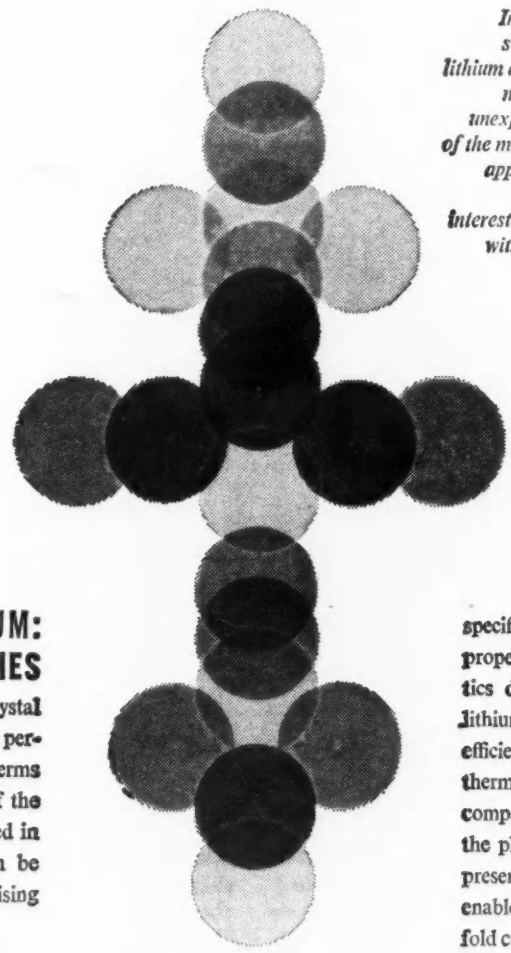
HERCULES POWDER COMPANY
INCORPORATED
900 Market Street, Wilmington 99, Delaware

CHEMICAL MATERIALS FOR INDUSTRY

Ethyl acrylate, dms., c.l., t.l., dlvd. lb. .36 • —
dms., l.t.l., dlvd. lb. .37 • —
tanks, dlvd lb. .34 • —
Ethyl alcohol, 190 pf., USP, tax paid dms, c.l., dlvd. E. of Rockies gal. 20.63 • —
dms., l.c.l., same basis gal. 20.68 -20.74
Ethyl alcohol, 190 pf., USP, tax-free, dms., c.l., dlvd. E. of Rockies gal. .68 • —
dms., l.c.l., same basis gal. .73 • .79
tanks, same basis gal. .52 • —
Ethyl alcohol, absolute, 200 pf., tax paid, dms., dlvd. E. of Rockies gal. 21.75 • —
dms., l.c.l., same basis gal. 21.80 -21.86
tanks, same basis gal. 21.59 • —
Ethyl alcohol, denatured (see Denatured alcohol, ethyl).
Ethyl aminobenzoate, USP (see Benzocaine).
Ethyl amyl ketone, dms., c.l., dlvd. lb. .20 • —
dms., l.c.l., same basis lb. .21½- —
tanks, same basis lb. .17½- —
Ethy benzoate, bots. lb. .75 • 1.00
Ethyl bromide, tech., 98%, dms., c.l., frt. alld. E lb. .43 • —
dms., l.c.l., frt. alld. E. lb. .45 • —
tanks, frt. alld. E lb. .41 • —
Ethyl butyl ketone, dms., c.l., t.l., works lb. .36 • —
dms., l.c.l., t.l. works lb. .36¾- —
tanks, works lb. .34 • —
Ethyl butyrate, dms., works lb. .85 • 1.00
Ethyl carbamate (see Urethane).
Ethyl cellulose, vis. 7 cps., bgs., 5,000-lb. lots or more, frt. alld. E lb. .73 • —
bgs., smaller lots, frt. alld. E lb. .75 • —
Vis. 10, 20, 50, 100, 150 cps., bgs., 5,000-lb. lots or more, frt. alld. E lb. .68 • —
bgs., smaller lots, frt. alld. E. lb. .70 • —
Ethyl chloride, tech., cyls., works. lb. .20 • .22
dms., works lb. .18 • .20
tanks, works lb. .10 • —
Ethyl cinnamate, cns. lb. 3.35 • 3.50
Ethyl ethanolamies, mixed, dms., c.l., dlvd. E. lb. .43½- —
dms., l.c.l., dlvd. E. lb. .44½- —
tanks, dlvd. E. lb. .41½- —
Ethyl ether, absolute, ACS, dms. lb. .27 • —
Anesthesia, USP, dealers, 1-lb. cns. lb. 1.01 • —
½-lb. cns lb. 1.09 • —
¼-lb. cns. lb. 1.21 • —
Indust., dms., c.l., dlvd. lb. .13½- —
dms., l.c.l., dlvd. E. lb. .15 • —
tanks, dlvd E. lb. .11 • —
2-Ethyl hexoic acid, dms., c.l., t.l., dlvd. E lb. .37 • —
dms., l.c.l., l.t.l., dlvd. E. lb. .38½- —
tanks, dlvd. E. lb. .34½- —
2-Ethyl hexoic acid, 1c. higher W. of Rockies.
2-Ethyl hexyl acrylate, dms., c.l., t.l., straight or mixed, frt. alld. E. lb. .42¼- —
dms., l.t.l., same basis lb. .43½- —
tanks, same basis lb. .40 • —
Prices of 2-ethylhexyl acrylate are 1½c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
2-Ethylhexyl alcohol, dms., c.l., dlvd. lb. .23¾- —
dms., l.c.l, dlvd. lb. .25¼- —
tanks, dlvd. lb. .21¼- —
Ethyl iodide, cbys., works lb. 3.30 • —
Ethyl methacrylate, dms., c.l., frt. equald lb. .52 • —
dms., l.t.l., frt. equald lb. .52½- —
tanks, frt. equald lb. .50 • —
Ethyl morphine hydrochloride, USP, bots oz. 11.85 • —
Ethyl oenanthate, dms lb. 1.05 • 1.30
Ethyl oxalate (see Diethyl oxalate).
Ethyl silicate, dist. (see Tetraethyl orthosilicate).
Ethyl silicate, 40% available SiO, dms., c.l., dlvd. lb. .44½- —
dms., l.c.l., dlvd lb. .46 • —
tanks, dlvd lb. .42 • —
N-Ethyl-a-naphthylamine, dms., works, lb. 1.02 • —
N-Ethyl-m-toluidine, tech., liq., tanks, frt. alld lb. .83 • —
N-Ethyl-o-toluidide, bbls. lb. .88 • —
Ethylamine (see Mono-, Di-, or Tri-)
N-Ethylaniline, dms., c.l., frt. alld. lb. .57 • —
dms., l.c.l., frt. alld lb. .58 • —
tanks, frt. alld lb. .55 • —
Ethylbenzene, 99%, dms., c.l., t.l., frt. equald lb. .15 • —
dms., l.c.l., same basis lb. .17 • —
tanks, same basis lb. .12½- —
2-Ethylbutyl alcohol, dms., c.l., works lb. .30 • —
dms., l.c.l., works lb. .30¾- —
tanks, works lb. .28 • —
Ethylene, contract, refy. gate lb. .0475- .0525
Ethylene dibromide, dms., c.l., frt. equald lb. .30½- —
dms., l.c.l., frt. equald lb. .31½- —
tanks, frt. equald lb. .28½- —
Ethylene dichloride, dms., c.l., dlvd. lb. .11¼- —
dms., l.c.l., same basis lb. .13 • —
tanks, same basis lb. .09 • —
Ethylene dichloride prices W. of Rockies, 1c. per lb. higher.
Ethylene glycol, indust., dms., c.l., dlvd. E lb. .16 • —
dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .13½- —
Ethylene glycol monobutyl ether, dms., c.l., dlvd. E lb. .22 • —
dms., l.c.l., dlvd. E lb. .23½- —
tanks, dlvd. E lb. .19½- —
Ethylene glycol monoethyl ether, dms., c.l., dlvd. E lb. .21 • —
dms., l.c.l., dlvd. E lb. .22½- —
tanks, dlvd. E lb. .18½- —
Ethylene glycol monoethyl ether acetate, dms., c.l., dlvd. E lb. .19½- —
dms., l.c.l., dlvd. E lb. .20½- —
tanks, dlvd. E lb. .17 • —
Ethylene glycol monomethyl ether, dms., c.l., dlvd. E lb. .21 • —
dms., l.c.l., dlvd. E lb. .22½- —
tanks, dlvd. E lb. .18½- —
Ethylene glycol monomethyl ether acetate, dms., c.l., dlvd. E lb. .29 • —
dms., l.c.l., dlvd. E lb. .29¾- —
tanks, dlvd. E lb. .27 • —
Ethylene glycol monostearate, triple pressed, dms lb. .33 • .35
Ethylene oxide, dms., c.l., dlvd. E. lb. .21½- —
dms., l.c.l., dlvd. E lb. .24½- —
tanks, dlvd. E lb. .15½- —
Ethylene trichloride (see Trichloroethylene).
Ethylenediamine, 85-88%, dms., c.l., dlvd. E., 100% basis lb. .42 • —
dms., l.c.l., dlvd. E., 100% basis, lb. .43 • —
tanks, dlvd. E., 100% basis lb. .40 • —
lots and over lb. 6.75 • —
200-lb. lots and over lb. 7.00 • —
100-lb. lots and smaller lb. 7.30 • 7.40
Ethylvanillin, 100-lb. fib. dms., 500-lb.
Eucalyptol, USP, cns., dms lb. .85 • 1.40
Eucalyptus oil, NF, rectified, 70-75%, dms lb. .44 • .55
NF, rectified, 80-85%, dms. lb. .53 • .62
Eugenol, tech., dms lb. 1.45 • —
USP, dms lb. 2.10 • 2.80
Euphorbia herb, bls lb. .12 • .15

F

F salt, paste, tech. dms., works lb. 2.30 • —
Feldspar, 140-200 mesh, bulk, c.l., works ton. 19.50 • —
Feldspar in bags $3 per ton higher.
Fennel oil, sweet, USP, cns lb. 2.25 • 2.70
Fennel seed, Argentine, bgs lb. .14 • —
French, light, bgs lb. .20 • —
Indian, light, bgs lb. .17 • —
Rumanian, bgs. lb. .14 • —
Yugoslav, light, bgs lb. .16½- —
Fenugreek seed, Moroccan, bgs lb. .07½- —
Ferric chloride, anhyd., tech., dms., c.l., works 100 lbs. 7.50 • —
dms., l.c.l., works 100 lbs. 8.50 • —
Indust., cryst., bbls., c.l., works, 100 lbs. 5.25 • 6.75
bbls., l.c.l., works 100 lbs. 5.75 • 7.25
42° Be., photo grade, cbys., c.l., works 100 lbs. 7.25 • 8.25
sewage grade, tanks, frt. equald, 100% basis 100 lbs. 4.00 • —
USP, cryst., dms., t.l., works lb. .08½- —
Ferric citrate, gran., dms lb. .86 • —
Ferric hypophosphite, NF, dms lb. 3.45 • —
Ferric naphthenate, liq., 6% Fe, dms., frt. alld lb. .28¼- —
Ferric oxalate, tech., gran., 50-lb. dm., f.o.b. works E lb. .89 • —
Ferric oxides (see iron oxides).
Ferric phosphate, NF, soluble, gran. pearls, cs lb. .72 • .75
Ferric pyrophosphate, NF VII, soluble, gran., pearls, dms. lb. .70 • —
Ferric resinate, 6¾% Fe., dms., ton lots, frt. ald lb. .40¼- —
Ferric stearate, dms., c.l., frt. alld, lb. .39 • —
dms., l.c.l., frt. alld lb. .40 • .44
Ferric sulfate, partly hydrated, bgs., c.l., works ton. 35.25 • —
bgs., l.c.l., works ton. 36.25 -42.25
bulk, c.l., works ton. 33.25 • —
Ferric-ammonium citrate, brown, pearls, NF, gran., dms lb. .65 • .68
Green pearls, USP XII, gran., dms lb. .66 • .69
Ferric-ammonium oxalate, fine gran., dms lb. .27½- .29½
Ferric-potassium oxalate, fine gran., dms lb. .32½- .34½
Ferric-sodium oxalate, fine gran., dms lb. .27½- .29½
Ferrous gluconate, USP, 200-lb. dm., frt. equald lb. .56 • —
Ferrous sulfate, gran., bgs., c.l., works ton. 34.50 • —
bgs., l.c.l., dlvd, Metropolitan area 100 lbs. 3.35 • 4.25
bbls., c.l., works ton. 40.00 • —
bulk, c.l., works ton. 27.00 • —
USP, cryst., bbls., dms lb. .09½- .10
Fir balsam, Canada, bbls gal. 32.00 -35.00
Oregon, bbls. gal. 3.40 • 4.64
Fir oil, Canada, cns lb. 1.75 • 2.50
Fish oil, refd., alkali, dms lb. .1250- .1300
Kettle-bodied, dms. lb. .1480- .1530
Light-pressed, dms. lb. .1100- .1150
tanks lb. .09½- —
Fishliver oil, nat., high potency, 100,000 to 1,500,000 A units per gram, dms 1,000,000 units. .12 • —
Fishmeal, dom., menhaden, 60% protein, grd., bgs., Atlantic and Gulf coasts ton. 100.00 • —
Fishscrap, dom., menhaden, dried, 60% protein, grd., bgs., Atlantic and Gulf coasts. ton. 96.00 • —
Fleaseed (see Psyllium seed).
Folic acid, USP, bots., fib. dms., kilo lots or more gram. .30 • .44
10% feed grade, fib. dms., 3 kilos or more kilo. 30.00 -44.00
Formaldehyde, 37% (inhibited, 12 to 15% methanol), USP, dms., c.l., dlvd lb. .0695- —
tanks, dlvd. lb. .0430- —
Formaldehyde, methanol-free (uninhibited), tanks, dlvd lb. .0375- —
Formic acid, 85%, cbys., c.l., works, lb. .1570- —
cbys., l.c.l., works lb. .1620- .1720
90%, cbys., c.l., works lb. .1625- —
cbys., l.c.l., works lb. .1675- .1775



In lithium's differences lie its greatest strengths. Nominally an alkali metal, lithium does not always act like its Group IA neighbors . . . earning it the tag, "the unexpected element." The gratifying fact of the matter is that lithium's most promising applications reflect its most unexpected properties. A number of the more interesting properties, all of them concerned with the solid state, are discussed here.

THE CASE FOR LITHIUM: SOLID STATE PROPERTIES

The wide range of ionic or crystal radii displayed by the alkali metals permits their nominal classification in terms of other cations for which each of the alkali metal ions may be substituted in crystal lattices. Thus, lithium can be associated with 21 elements comprising small crystal ions.

Mg^{2+}, Al^{3+}, Ga^{3+}, Cr^{3+}, V^{3+}, Ti^{4+}, Fe^{3+}, Ge^{4+}, Mo^{6+}, W^{6+}, Ni^{2+}, Co^{2+}, Fe^{2+}, Zn^{2+}, Sc^{3+}, In^{3+}, Zr^{4+}, Hf^{4+}, Sn^{4+}, Nb^{5+}, Ta^{5+}

By comparison, the larger sodium, potassium, rubidium and cesium ions can replace few other cations without materially distorting or disturbing the existing arrangement of lattice units. This size factor . . . plus the ability of lithium ions to aid in stabilizing ions of higher valence state in a host crystal . . . is responsible for the interesting catalytic or semiconductor properties common to mixed lithium oxide—transition metal oxide systems.

Oxides of the type:
$(Li_x M^{+}_{1-2x} M_x^{3+}) O$ or $Li_x M_{1-x} O$,
where M is Mn, Fe, Co, or Ni, are p-type controlled impurity semiconductors of high electrical conductivity.

METALLURGY A small atom, plus high electronegativity permits lithium alone of all the alkali metals to be incorporated as a beneficial alloying constituent of numerous metals, including Mg, Cd, Al, Be, and Ag. In general, the lithium alloys of these metals exhibit increased strength and better working properties than the base material. One good example is the increased strength at higher operating temperatures of new aluminum-lithium alloy 2020. Lead-lithium alloys also have higher tensile strength than pure lead. By taking advantage of the excellent neutron absorption properties of the lithium-6 isotope, these alloys can be fabricated into excellent shields against thermal neutrons and gamma radiation.

CERAMICS The inclusion of lithium in glasses and glazes yields more condensed and compact structures with decreased thermal expansion and increased stability. It is still difficult to point to the specific atomic, molecular, and ionic properties on which these characteristics depend. But the growing use of lithium in ceramics with a very low coefficient of thermal expansion and high thermal shock resistance is being accompanied by increasing research into the physical chemistry of lithium. The presence of lithium in a glass structure enables the alumina ion to attain fourfold coordination, thus serving as a glass former. And lithium's small ionic radius permits a lithium ion coupled with an aluminum ion to displace two magnesium ions in the spinel structure.

MORE TO COME: The tale of lithium is neither easily nor quickly told. The material presented here constitutes the briefest of introductions. But if it has whet your appetite, we can happily provide you with more of the same—long on facts and ideas, short on flim-flam, and complete with derivations and references. Just write for a copy of "Lithium vs. The Other Alkali Metals". Foote Mineral Company, 407 18 West Chelten Building, Philadelphia 44, Pennsylvania.

FOOTE MINERAL COMPANY

Fringetree bark, bls. ..... lb. .65 - .70
Fumaric acid, tech., 250-lb. dms., c.l., frt. equald. lb. .22¾- —
dms., l.c.l., frt. equald. lb. .24¼- —
Fumaric acid in bags ½c. per lb. less.
Furfural, dms., c.l., works ..... lb. .13 - —
dms., l.c.l., works ..... lb. .14 - —
tanks, dlvd. E ..... lb. .12 - —
tanks, dlvd. W ..... lb. .13 - —
Furfuryl alcohol, cns., works ... lb. .28 - —
dms., c.l., t.l., Newark, N. J. . lb. .20½- —
dms., l.c.l., t.l., Newark, N. J. lb. .21½- —
dms., c.l., t.l., Memphis, Tenn. lb. .19 - —
dms., l.c.l., t.l., Memphis, Tenn. lb. .20 - —
tanks, Memphis, Tenn. ..... lb. .175 - —
Fusel oil, refd., dms., c.l., dlvd. lb. .18 - —
dms., l.c.l., dlvd. ..... lb. .19½- —
tanks, dlvd. ..... lb. .15½- —

G

G salt, bbls., frt. alld., 100% basis lb. .73 - —
Gallic acid, NF, VII, bbls., 1,000-lb. lots lb. 2.00 - —
bbls., smaller lots ..... lb. 2.02 - 2.22
Tech., bbls., 1,000-lb. lots .... lb. 1.78 - —
bbls., smaller lots ..... lb. 1.80 - 2.00
Gamma acid, dry grd., bbls., frt. alld. lb. 1.75 - —
Gammapicoline (see g-picoline).
Garlic oil, dom., bots. ..... oz. 4.75 - 6.05
Imp., bots. ..... oz. 4.50 - 5.00
Gaultheria oil (see Wintergreen oil).
Gelatin, edible, 75 AOAC test, bbls., c.l., dlvd lb. .55 - —
150 AOAC test, bbls., c.l., dlvd. lb. .64 - —
200 AOAC test, bbls., c.l., dlvd. lb. .70 - —
225 AOAC test, bbls., c.l., dlvd. lb. .74 - —
275 AOAC test, bbls., c.l., dlvd. lb. .82 - —
Gelsemium root, bls. ..... lb. .30 - .35
Gentian root, bls. ..... lb. .24 - —
Grd., bbls., bxs. ..... lb. .30 - —
Powd., bbls., bxs. ..... lb. .30 - —
Geraniol, extra, cns., dms. ..... lb. 1.75 - 2.40
Soap grade, dms. ..... lb. .90 - 1.75
Standard, cns., dms., ... lb. .90 - 1.75
Synthetic, dms. ..... lb. 1.30 - —
Geranium oil, Algerian, cns .... lb.20.00 - —
Bourbon, cns. ..... lb.22.00 -26.00
Geranium oil, Turkish (see Palmarosa oil).
Geranyl acetate, cns. ..... lb. 1.90 - 2.70
Synthetic, dms. ..... lb. 1.45 - —
Ginger oil, dist., bots. ..... lb.11.50 -14.00
Ginger oleoresin, NF, from African root, bots lb. 4.25 - 5.00
NF, from Jamaican root, bots. lb. 7.75 - —
Ginger root, Cochin, bgs ..... lb. .22 - —
Jamaican, No. 3, bgs ..... lb. .28 - —
Nigerian, split, bgs ..... lb. .14½- —
Sierra Leone, bgs ..... lb. .22 - —
Glauber's salt (see Sodium sulfate).
Gluconic acid, tech., 50%, dms., c.l., t.l., frt. alld. lb. .18 - —
dms., l.c.l., frt. alld. ..... lb. .20½- —
tanks, frt. alld. ..... lb. .13½- —
Glue, bone, extracted, dry bone, 85 jellygrams, bgs., c.l., dlvd. lb. .16 - —
131 jellygrams, bgs., c.l., same basis lb. .16½- —
164 jellygrams, bgs., c.l., same basis lb. .18½- —
191 jellygrams, bgs., c.l., same basis lb. .19½- —
222 jellygrams, bgs., c.l., same basis lb. .21 - —
Glue, bone, green, 40 jellygrams, bgs., c.l., same basis lb. .16 - —
85 jellygrams, bgs., c.l., same basis lb. .16 - —
115 jellygrams, bgs., c.l., same basis lb. .16½- —
Glue, bone, green, 135 jellygrams, bgs., c.l., same basis lb. .17½- —
164 jellygrams, bgs., c.l., same basis lb. .18½- —
180 jellygrams, bgs., c.l., same basis lb. .19½- —
200 jellygrams, bgs., c.l., same basis lb. .20½- —
Bone glue, l.c.l., prices 2c. higher.
Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd. lb. .18 - —
95-149, bgs., c.l., dlvd. ..... lb. .19 - —
122-149, bgs., c.l., dlvd. ..... lb. .20½- —
150-177, bgs., c.l., dlvd. ..... lb. .22½- —
178-206, bgs., c.l., dlvd. ..... lb. .25 - —
Glue, hide, 207-236, bgs., c.l., dlvd lb. .28 - —
237-266, bgs., c.l., dlvd. ..... lb. .30½- —
267-298, bgs., c.l., dlvd. ..... lb. .32½- —
299-330, bgs., c.l., dlvd. ..... lb. .34½- —
331-362, bgs., c.l., dlvd. ..... lb. .36½- —
363-394, bgs., c.l., dlvd. ..... lb. .38 - —
395-427, bgs., c.l., dlvd. ..... lb. .40 - —
428-460, bgs., c.l., dlvd. ..... lb. .42 - —
461-494, bgs., c.l., dlvd. ..... lb. .44 - —
495-529, bgs., c.l., dlvd. ..... lb. .46 - —
Hide glue, l.c.l., prices 2c. higher.
l-Glutamic acid, 99½%, fib. dms., 100-lb. lots, frt. alld. lb. 1.80 - —
fib. dms., 25-lb. lots, frt. alld. lb. 1.88 - —
l-Glutamine, bots., 1-9 kilo lots, kilo.150.00 -300.00
Bots., 50-kilo lots ..... kilo.100.00 - —
Bots., 500-kilo lots ..... kilo. 75.00 - —
Glycerine, dom., nat., crude, saponification, 88%, tanks dlvd. lb. .21½- .21¾
nat., crude, soaplye, 80%, tanks, dlvd lb. .19 - .19¾
nat., refd., USP, CP, 99%, dms., c.l., dlvd. lb. .30⅞- —
dms., l.c.l., dlvd. ..... lb. .31⅝- —
tanks, dlvd. ..... lb. .29⅛- —
Glycerine, dom., nat., refd., USP, CP, 96%, dms., c.l., dlvd. lb. .30 - —
dms., l.c.l., dlvd. ..... lb. .30¾- —
tanks, dlvd. ..... lb. .28¼- —
nat., high gravity, dms., c.l., dlvd. lb. .30¾- —
dms., l.c.l., dlvd. ..... lb. .31½- —
tanks, dlvd. ..... lb. .29 - —
Glycerine, dom., syn., dms., c.l., dlvd. lb. .31 - —
dms., l.c.l., dlvd. ..... lb. .31¾- —
tanks, dlvd. ..... lb. .29¼- —
Imp., nat., crude, soaplye, 80%, c.i.f. lb. .19 Nom.
Glycine (see Aminoacetic acid).
Glycerol (see Glycerine).
Glycolic acid (see Hydroxyacetic acid).
Glycolonitrile, 70%, aqueous, dms., c.l., t.l., works lb. .40 - —
dms., l.c.l., same basis ..... lb. .42 - —
tanks, same basis ..... lb. .39 - —
Glyoxal, 30%, dms., c.l., works lb. .20½- —
dms., l.c.l., works ..... lb. .21¼- —
tanks, works ..... lb. .18 - —
Golden seal root, NF, tested, bls. lb. 2.75 - 3.25
Gramicidin, 1 to 5 kilos, f.o.b. works, gram. 4.70 - —
Grapefruit oil, dms. ..... lb. 3.00 - 3.50

Graphite, amorp., powd., bgs., fib. dms., ex whse. lb. .06 - .09½
Cryst., 88-90%, powd., bgs., fib. dms., ex whse. lb. .19 - .21½
90-92%, powd., bgs., fib. dms., ex whse. lb. .21 - .24½
95-97%, powd., bgs., fib. dms., ex whse. lb. .29 - .31½
Flake, No. 1, 90-95%, bgs., fib. dms., ex whse. lb. .29 .31
No. 2, 90-95%, bgs., fib. dms., ex whse. lb. .29 - .31
Grease, white, choice all hog, tanks, dlvd. lb. .06½- —
Yellow, tanks, dlvd. ..... lb. .05½- —
Grease oil, No. 1, dms., c.l. ..... lb. .13¾ Nom.
dms., l.c.l. ..... lb. .14¾ Nom.
Extra winter, strained, dms., c.l. lb. .16¼ Nom.
dms., l.c.l. ..... lb. .17¼ Nom.
Prime, burning, dms., c.l. .... lb. .17¾ Nom.
dms., l.c.l. ..... lb. .18¾ Nom.

GREEN PIGMENTS
Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

Grindelia robusta herb, bls. .... lb. .40 - —
Guaiacol, NF, cryst., dms., tins lb. 2.10 - 2.15
NF, liq., cbys., dms. ..... lb. 2.30 - 2.40
Guaiacol carbonate, NF VII, dms lb. 3.40 - 3.45
Guaiacwood oil, cns. ..... lb. .75 - 1.30
Guar gum, food grade, bgs., c.l. lb. .38 - —
bgs., 5,000 lbs or more ..... lb. .39 - —
Indust., bgs., c.l. ..... lb. .32 - —
Tech grade, bgs. ..... lb. .30 - .33

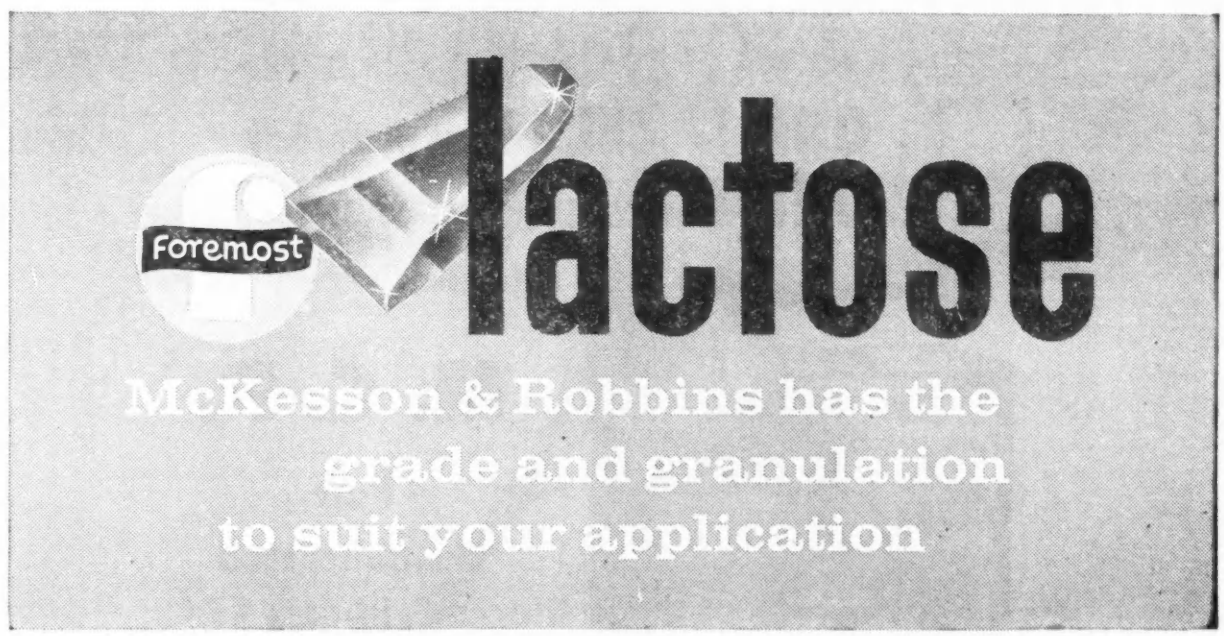
GUMS
Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

Gypsum, plaster of Paris, 100-lb. paper bgs., trucks, dlvd. New York ton.20.30 - —
Terra alba, dom., 100-lb. paper bgs., trucks, same basis. ton.20.00 - —
100 lb. paper bgs., trucks, works, New York ton.17.00 - —
Terra alba, imp., English, 100-lb. paper bgs., l.c.l., ex dock, New York ton.55.00 - —
100-lb. paper bgs., ex whse. ton.60.00 -62.00

H

H acid, dry, bbls., c.l., frt. alld., 100% basis lb. .90 - —
bbls., l.c.l., same basis ..... lb. .95 - —
Hansa yellow, 10 G, bbls., dlvd. E. of Rockies lb. 2.45 - —
Hansa G yellow, pigment, bbls. lb. 2.20 - —
Hawthorn berries, bgs. ..... lb. .18 - .20
Heliotropin, 100-lb. lots, dms. .... lb. 2.60 - 3.40
Hellebore root, dom., green, bls lb. .70 - .75
Helonias root, bls. ..... lb. 1.50 - —
Hemlock oil, cns. ..... lb. 2.55 - 3.00
Henbane leaves, bls. ..... lb. .35 - .40
Heptachlor, dms., c.l., t.l., frt. alld., 100% basis lb. .96 - —
Heptane, indust., tankcars, New Jersey and New York gal. .20 - —
Houston, Texas ..... gal. .1625- —

Hesperidin, purif., 100-lb. fib. dms., f.o.b., works lb. 8.93 - —
Hesperidin methylchalcone, bots., 50-lb. lots, works lb.22.50 - —
bots., 5-lb. lots, works ..... lb.23.00 - —
bots., 1-lb. lots, works ..... lb.23.50 - —
Hexachlorophene, dms., 1,100 lbs. or more lb. 1.84 - —
dms., to 1,100 lbs. ..... lb. 1.94 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or New York City lb. .233 - —
Hexamethylenetetramine, tech., bgs., 1,000-19,999-lb. lots, same basis lb. .243 - —
bgs., smaller lots, same basis lb. .253 - —
fib. dms., 1,000-lb. lots or more, same basis lb. .250 - —
fib. dms., smaller lots, same basis lb. .253 - —
USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd. New York City and Philadelphia lb. .42½- —
bgs., smaller lots, same basis lb. .43½- .48¼
Hexane, industrial, tankcars, New Jersey and New York gal. .20 - —
Houston, Texas ..... gal. .16 - —
1-Hexanol, dms., c.l., works ..... lb. .35 - —
dms., l.c.l., works ..... lb. .35¾- —
tanks, works ..... lb. .33 - —
Hexyl cinnamic aldehyde, dms lb. 4.00 - 7.50
n-Hexyl methacrylate, dms., c.l., works lb. .75½- —
dms., l.c.l., works ..... lb. .76 - —



CHOOSE FROM THESE 5 GRADES:

- Lactose U.S.P.
- Lactose U.S.P.—Spray Process
- Lactose Edible
- Crude Milk Sugar
- Lactose Fermentation Grade

10 granulations available

COLORED LACTOSE is now produced in refined grades that offer the chemical and drug industries many unique and profitable applications.

DISTRIBUTED NATIONALLY BY

Chemical Department 21F

McKESSON & ROBBINS, INC.

155 E. 44th Street, New York 17, N.Y.

84 Warehouses—47 Sales Offices

WESTERN CONDENSING COMPANY

Appleton, Wisconsin

World's Largest Producer of Lactose—Pure Milk Sugar

DIVISION OF FOREMOST DAIRIES, INC.

Hexyl Salicylate—Isopropyl-N-(3-chlorophenyl) Carbamate

Hexyl salicylate, dms. . . . . lb. 1.75 - —
Hexylene glycol, dms., c.l., dlvd lb. .17½- —
dms., l.c.l., dlvd. . . . . lb. .19 - —
tanks, dlvd. . . . . lb. .15 - —
Hexylresorcinol, USP, dms., 25-lb. lots or more, dlvd lb.14.00 - —
dms., smaller lots, dlvd. . lb.14.50 - —
Homatropine hydrobromide, USP, bots oz. 3.25 - —
Homatropine methylbromide, USP, bots oz. 3.25 - —
Hoofmeal, 17-18% ammonia bulk, c.l., Chicago unit-ton 6.75 - —
Horehound herb, bls. . . . . lb. .18 - .20
Hydrastis (see Goldenseal).
Hydrazine hydrate, 65% ret. dms., works lb 1.35 - 1.55
100% ret. dms., works lb 1.60 - 1.90
Hydriodic acid, purif., 47%, 2-cbys., f.o.b. works lb. 2.92 - —
Hydroabietyl alcohol, tech., solid, dms., c.l., dlvd. zone 1 lb. .29¼- —
dms., l.c.l., dlvd. zone 1 lb. .29¾- .30¼
tanks, dlvd. zone 1 . . . lb. .27¼- —

Zone 1 for hydroabieyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo., and the western part of Texas.

Hydrobromic acid, medicinal, 48%, cbys., frt. equald lb. .48 - .56
Hydrochloric acid, anhyd. (see Hydrogen chloride).
Hydrochloric acid, 18°, cbys., c.l., works 100 lbs. 2.50 - —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs. 2.90 - 3.05
tanks, works, frt. equald ton 28.00 - —
20°, cbys., c.l., works 100 lbs. 2.75 - —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs. 3.15 - —
tanks, works, frt. equald ton 30.00 - —
Hydrochloric acid, 22°, cbys., c.l., works 100 lbs. 3.25 - —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs. 3.65 - —
tanks, works, frt. equald ton 35.00 - —
Hydrochloric acid, CP, USP, consumers, cbys., extra, c.l., works lb. .15¾- —
cbys., l.c.l., same basis lb. .17¼- .17¾
Hydrochloric acid, 5-pint bots., extra cs., c.l., same basis, lb. .20¾- —
Hydrocortisone acetate, bulk, bots., kilo lots or more gram. 1.10 - 1.90
Hydrocortisone alcohol, bulk, bots., kilo lots or more gram. 1.10 - 1.90
Hydrocyanic acid, dilute, NF, 2%, 5-pt. bots., f.o.b. works pt. .70 - —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride).
Hydrofluoric acid, aqueous, 70%, 55-gal. or 30-gal. dms., c.l., t.l., dlvd. 100 lbs.19.25 - —
55-gal. dms., l.c.l., l.t.l., dlvd. 100 lbs.20.75 - —
20-gal. dms., c.l., t.l., dlvd. 100 lbs.21.00 - —
20-gal. dms., l.c.l., l.t.l., dlvd. 100 lbs.22.50 - —
tanks, works frt. equald. 100 lbs.13.40 - —

Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming. In these states add $2.70 per cwt. for drum delivery.

Hydrofluosilicic acid, dms., works, 30% basis lb. .06 - —
Hydrofuramide, dms., tib. cans, works lb. .30 - .40
50-lb cyls., l.c.l., works . . . lb. .55 - .60
Hydrogen chloride, anhyd., 50-lb. cyls., l.c.l., works lb. .45 - —
Hydrogen cyanide, liq., 98%, tanks, works lb. .14 - —
Hydrogen fluoride, anhyd., cyls., dlvd. E lb. .30½- .32½
cyls., dlvd W . . . . . lb. .39 - —
tanks, works . . . . . lb. .18 - —
Hydrogen peroxide, 35%, dms., c.l., dlvd. lb. .202 - —
dms., l.c.l., dlvd. . . . . lb. .211 - —
tanks, dlvd. . . . . lb. .1860- —
Hydroquinone, photo grade, dms., 50-lbs., f.o.b. works lb. 1.10 - —
Tech., dms., c.l., dlvd. . . . . lb. .82½- —
dms., l.c.l., dlvd . . . . . lb. .84½- —
Hydroquinone monomethyl ether, dms., t.l., dlvd lb. 2.59 - —
dms., l.t.l., dlvd. . . . . lb. 2.61 - —
Hydroxyacetic acid, tech., 70% dms., Philadelphia and Chicago lb. .11 - —
tanks, Belle, W. Va. . . . . lb. .073 - —
Hydroxycitronellol, cns. . . . . lb. 4.85 - 5.75
Hydroxyethyl cellulose, add grades, fib. dms., 20,000-lb. lots or more, f.o.b. shipping point lb. .84 - —
fib. dms., 2,000 to 19,999-lb. lots, same basis lb. .89 - —
fib. dms., 100 to 1,999-lb. lots, same basis lb. .93 - —
fib dms., smaller lots, same basis lb. 1.03 - —
Hyoscine salts (see Scopolamine).
Hyoscyamine hydrobromide, bots.oz. 7.00 - —
Hyoscyamine sulfate, bots. . . . . oz. 7.00 - —
Hypophosphorous acid, purif., 50%, 10-cbys., f.o.b. works lb. 1.95 - —
NF, 50%, 10-cbys., same basis lb. 1.35 - —

I

Ichthammol, NF, dms. . . . . lb. .75 - 1.05
Indigo (see Dyes, coaltar, 1171 indigo, syn.).
Indole, CP bots. lb.14.75 18.25
Inositol, 50-100 lb. dms., 1,000 lbs. or more, dlvd. lb. 4.50 - —
50-100 lb. bgs., less than 1,000 lb., dlvd lb. 4.75 - —
10 lb. cns., 10-50 lbs., dlvd. lb. 5.00 - —
5 lb. bots., dlvd. . . . . lb. 5.25 - —
Insect flowers (see Pyrethrum).
Iodine, crude, kgs. . . . . lb. .95 - —
Resub., USP, dms., f.o.b. works lb. 2.00 - 2.02
Iodochlorohydroquinolin, USP, gms. lb. 3.60 - —
Iodoform, NF, dms., 300-lbs., f.o.b. works lb. 4.90 - —
dms., 100-lbs., same basis . . . lb. 5.05 - —
a-Ionone, cns. . . . . lb. 4.60 - 5.75
b-Ionone, cns. . . . . lb. 4.15 - 6.15
Ipecac root, whole, bgs. . . . . lb. 8.00 - 8.50
Powd., bbls., bxs. . . . . lb. 9.50 -10.00
Irish moss, bleached, prime, bls lb. .20 - .23
Iron blue, alkali-resisting, bbls., c.l., dlvd. E lb. .57 - —
bbls., l.c.l., ton lots, same basis, lb. .58 - —
bbls., smaller lots, same basis lb. .59 - —
Dom., reg., bbls., c.l., dlvd. E lo. .52 - —
Iron blue, alkali-resisting, dom., reg., bbls., l.c.l., ton lots, same basis lb. .53 - —
bbls., l.c.l., smaller lots, same basis lb. .54 - —
Imp., British, reg., bbls., c.l., dlvd. E lb. .48 - —
bbls., l.c.l., ton lots, same basis lb. .49 - —
bbls., l.c.l., smaller lots, same basis lb. .50 - —
Iron blue dlvd. prices 1c. higher for Pacific Coast states: Wash., Ore., Cal., N. M., Ariz., Mont., Wyo., Utah, Col. and Nev.
Iron compounds (see Ferric or Ferrous).
Iron oxide, black, pure, bgs., c.l., works lb. .14¾- —
bgs., l.c.l., works . . . . lb. .15 - —
Iron oxide, brown, pure, bgs., c.l., works lb. .14¼- —
bgs., l.c.l., works . . . . lb. .14½- —
Iron oxide, metallic, brown, bgs., works lb. .05¼- —
Iron oxide, Persian Gulf, red., bgs., c.l., works lb. .08¾- —
Iron oxide, red, dom., pure, bgs., Bethlehem, East. E. St. Louis, New York City lb. .14¼- —
Iron oxide, red, nat., 75-85% ferric oxide, bgs., c.l., works lb. .08¼- —
bgs., l.c.l., works . . . . lb. .06½- —
Iron oxide, Spanish red, bbls., c.l., ex dock lb. .05¾ Nom.
bbls., l.c.l., ex dock lb. .06 Nom.
bbls., l.c.l., ex whse, New York. lb. .05½ Nom.
Iron oxide, yellow, nat., French type, bgs., c.l., works lb. .06¼- —
Peruvian type, bgs., l.c.l lb. .023 - .024
Iron oxide, yellow, pure, light lemon shade, bgs., c.l., works lb. .12¼- —
Other shades, same basis lb. .12 - —
Isoamyl alcohol, dms., c.l., works, frt. alld E lb. .27½- —
dms., l.c.l., same basis . . . . lb. .29 - —
tanks, same basis . . . . . lb. .25 - —
Isoborneol, cns. . . . . lb. 1.44 - 1.80
Isobornyl acetate, cns. . . . . lb. .46 - .56
Isobornyl formate, dms. . . . . lb. 1.20 - —
Isobornyl proprionate, dms. . . . . lb. 1.25 - 1.35
Isobutyl acetate, perfume grade, cns lb. .25 - —
Isobutyl acetate, solvent grade, dms., c.l., dlvd. E. of Rockies lb. .15¼- —
dms., l.c.l., same basis . . . . lb. .16¾- —
tanks, same basis . . . . . lb. .12¼- —
Isobutyl alcohol, dms., c.l., dlvd lb. .15½- —
dms., l.c.l., dlvd. . . . . lb. .17 - —
tanks, dlvd. . . . . lb. .13 - —
Isobutylene, 99%, tanks, works gal. .38 - —
Isobutyl isobutyrate, dms., f.o.b. works lb. .75 - —
Isobutyraldehyde, CP, dms., c.l., dlvd lb. .27½- —
dms., l.c.l., dlvd. . . . . lb. .28½- —
Tech., dms., c.l., dlvd. . . . . lb. .22 - —
dms., l.c.l., dlvd. . . . . lb. .23 - —
tanks, dlvd. . . . . lb. .19½- —
Isobutyronitrile, dms., c.l., dlvd lb. .52 - —
dms., l.c.l., same basis . . . . lb. .57 - —
Isobutyric acid, dms., c.l., t.l., dlvd. lb. .35 - —
dms., l.c.l., l.t.l., same basis lb. .36½- —
t.c. t.t., same basis . . . . lb. .33 - —
Isoeugenol, cns. . . . . lb. 3.40 - 4.25
Isoniazid, powd., bulk, kilo or more kilo.18.00 - —
Isonicotinic acid, 100-lb. fib. dms., works lb. 4.25 - —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol, dms., c.l., dlvd. E. lb. .23½- —
dms., l.c.l., dlvd. E. . . . . lb. .25 - —
tanks, dlvd. E. . . . . lb. .21 - —
Isopentane, com'l. grade, tanks, f.o.b. Tex. refy. gal. .16½- —
Isophorone, dms., c.l., works . . lb. .24½- —
dms., l.c.l., works . . . . . lb. .25¼- —
tanks, works . . . . . lb. .22½- —
Isophthalic acid, dms., c.l., works, frt. equald lb. .18 - —
dms., l.c.l., same basis . . . . lb. .19 - —
Isopropanol (see Isopropyl alcohol).
Isopropyl acetate, dms., c.l., dlvd. lb. .14 - —
dms., l.c.l., same basis . . . . lb. .15½- —
tanks, same basis . . . . . lb. .11½- —
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd gal. .58 - —
dms., l.c.l., dlvd. . . . . gal. .68 - —
tanks, dlvd. . . . . gal. .42 - —
Isopropyl alcohol, refd., 95%, c.l., dms., dlvd gal. .60 - —
dms., l.c.l., dlvd. . . . . gal. .70 - —
tanks, dlvd. . . . . gal. .44 - —
anhyd., c.l., dlvd. . . . . gal. .62 - —
dms., l.c.l., dlvd. . . . . gal. .72 - —
tanks, dlvd. . . . . gal. .46 - —
Isopropyl benzene (see Cumene).
Isopropyl ether, dms., c.l., dlvd lb. .09½- —
dms., l.c.l., dlvd. . . . . lb. .11 - —
tanks, dlvd. . . . . lb. .07 - —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC) tech., dms., c.l., t.l., works lb. 1.00 - —
dms., l.c.l., works . . . . . lb. 1.05 - 1.25
tanks, works . . . . . lb. .99 - —

ONE LABEL — *First Grade Only*
ONE PRICE — *That Saves You Money*
. . . and Perfect Performance for *Every* Purpose!

M. C. P.
Pure
Unadulterated
California
LEMON OIL
U. S. P.

An *Exclusively First Grade Lemon Oil* . . . Cold Pressed in California . . . and *Packed by the Producer* to Assure Highest Quality

For nearly 30 years, Mutual Citrus Products Co. has been cold-pressing California lemon oil for distribution by others. Now, M.C.P. LEMON OIL is being *prepared and packed* under the M.C.P. label. There is only *one label* and *one* quality — *the highest* — for M.C.P. LEMON OIL. Yet, M.C.P. LEMON OIL costs you *less* . . . while providing a product that is unsurpassed for flavor, purity, and dependability . . . for *every* purpose.

Produced and Packed by
MUTUAL CITRUS PRODUCTS COMPANY
Since 1928 Growers and Processors of Citrus Products

Distributed by

MUTUAL CITRUS PRODUCTS CO.
424 South Atchison Street, Anaheim, Calif.

R. D. WEBB & CO., INC.
137 Boston Post Road, Cos Cob, Conn.

Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works lb. .75 - —
450-lb. fib. dms., l.c.l., works lb. .80 - .90
Isoquinoline, dms., works lb. .65 - 1.25
Itaconic acid, refd., bgs., c.l., f.o.b. works lb. .53½- —
bgs., l.c.l., same basis lb. .54½- —
Tech., bgs., c.l., same basis lb. .38½- —
bgs., l.c.l., same basis lb. .39½- —

J

J acid, paste, bbls., works, 100% basis lb. 2.70 - —
Powd., bbls., same basis lb. 2.75 - —
Jalap root, NF, bls. lb. .60 - —
NF, powd., bbls., bxs. lb. .70 - .75
Japan wax, cs. lb. .29 - .31
Juniper berries, bgs. lb. .16 - .17
Juniper berry oil, NF, bots. lb. 3.75
Twice rectified, bots. lb. —
Juniper tar oil, NF, dms. lb. .42 - .60
Juniper wood oil, tech., cns. lb. .38 - .55

K

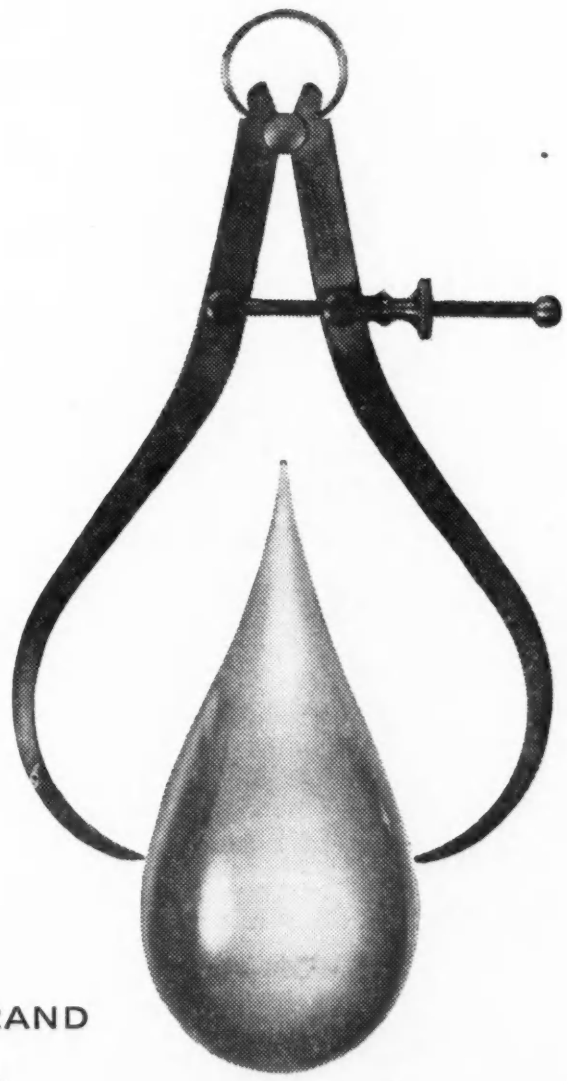
Kaolin (see also Clay, China).
Kaolin, NF, powd., fib. dms. lb. .10 - .12
NF, colloidal, 50-lb. bgs. lb. .15½- .17½
Karaya gum, No. 1, NF, powd., bls lb. .48 - .50
No. 2, powd., bbls. lb. .43 - .45
No. 3, powd., bbls. lb. .37 - .40
Koch acid, bbls., frt. alld., 100% basis lb. 1.00 - —
Kola nuts, bgs. lb. .13 - .15

L

L acid, bbls., works lb. 1.25 - —
Lacquer diluent, petroleum, 140°F. 200°F. b.r., tankcars, New Jersey and New York gal. .20 - —
Group 3 gal. .15125- —
Houston, Texas gal. .16 - —
200°F-240°F b.r., tankcars, New Jersey or New York gal. .20 - —
Group 3 gal. .14125- —
Houston, Texas gal. .16 - —
Lactic acid, edible, 50%, bbls. dms., c.l., frt. equald lb. .1985- —
bbls., dms., 20 or more, frt. equald lb. .2035- —
bbls., dms., 5 to 19, frt. equald. lb. .2085- —
bbls., dms., 1 to 4, frt. equald. lb. .2135- —
80%, bbls., c.l., dms., frt. equald lb. .3335- —
bbls., dms., 20 or more, frt. equald lb. .3385- —
bbls., dms., 5 to 19, frt. equald. lb. .3435- —
bbls., dms., 1 to 4, frt. equald. lb. .3485- —
Plastic grade, 50%, c.l., bbls., works lb. .2740- —
bbls., 20 or more, works lb. .2790- —
bbls., 5 to 19, works lb. .2840- —
bbls., 1 to 4, works lb. .2890- —
80%, bbls., c.l., works lb. .4625- —
bbls., 5 to 19, works lb. .4725- —
bbls., 1 to 4, works lb. .4775- —
Tech., 44%, bbls., c.l., works, 100 lbs. 12.45 - —
bbls., l.c.l., works 100 lbs. 12.85 - —
USP, 85%, cbys. lb. .85 - —
Lactose, crystalline, edible, bgs., 23,000-lb. lots, frt. equald lb. .14 - —
bgs., 6,000-lb. lots, frt. equald lb. .14½- —
bgs., 2,000-lb. lots, frt. equald lb. .14¾- —
bgs., 200-lb. lots, frt. equald lb. .15¼- —
Edible lactose in fib. dms., ½c. higher.
Lactose, ferment, grade, bgs., c.l., works lb. .08½ —
Lactose, USP, reg., fib. dms., 30,000-lb. lots, frt. equald lb. .21½- —
fib. dms., 2,000-lb. lots, frt. equald lb. .22¼- —
200-1,880-lb. lots, frt. equald lb. .22¾- —
USP lactose in bags ½c. to 1c. lower.
USP, spray dried, bgs., t.l., frt. equald lb. .18½- —
bgs., l.t.l., frt. equald lb. .19 - .19¾
Lady's slipper root, bls lb. 3.00 - 3.50
Lamp black, bgs., c.l., works lb. .16 - .45
Lanolin, USP, anhyd., 400-lb. dms., works lb. .24 - .26
USP, annyd., cosmetic, 400-lb. dms., works lb. .26 - .30
USP, hydrous, 400-lb. dms., works. lb. .24 - —
Lard, cash, dms., Chicago lb. .09725- —
Lard oil (see Grease oil).
Larkspur seed, bgs. lb. .55 - —
Laurel leaf oil, dms., cns. lb. 9.75 - 12.50
Laurent's acid, bbls lb. .70 - —
Laurie acid, pure, dms lb. .35½- —
tanks lb. .34½- —
Lauryl alcohol, bots lb. 2.00 - 2.50
n-Lauryl methacrylate, dms., c.l., t.l., works lb. .65½- —
dms., l.t.l., works lb. .66 - —
Lavandin oil, 22-24%, dms. lb. 1.10 - 1.50
Abrial, dms. lb. 1.00 - 1.50
Lavender flowers, medium, bls lb. .55 - .60
Ord., bls. lb. .20 - .25
Select., bls. lb. .90 - 1.00
Lavender flower oil, USP, French, 35-37% ester, cns lb. 1.85 - 4.00
40-42% ester, cns. lb. 5.00 - 7.75
Spike, Spanish, cns. lb. 2.20 - 3.00
Lead acetate, NF, cryst., gran., powd., bbls lb. .34½- —
White, cryst., bbls. lb. .25½- —
gran., bbls. lb. .26½- —
powd., bbls. lb. .26½- —
Lead arsenate, acid powder, dealers, 3-50-lb. bgs. or any quantity, frt. alld. on $150 or more lb. .30½- —
1-lb. bgs., same basis lb. .47 - —
Lead, blue, basic sulfate, bbls., c.l., shipt. point, frt. alld lb. .17 - —
bbls., l.c.l., same basis lb. .18 - —
Lead carbonate (see Lead, white, basic carbonate).
Lead chloride, dms. lb. .52 - —
Lead iodide, NF, V jars lb. 3.82 - —
Lead linoleate fused, 26% Pb, dms. lb. .38 - —
Lead metal prime, pigs, New York. lb. .12 - —
St. Louis lb. .1180- —
Lead monosilicate, bgs., c.l., works, frt. equald lb. .1385- —
bgs., l.c.l., same basis lb. .1485- —
Lead naphthenate, liq., 16% Pb., dms., dlvd lb. .19½- —
24% Pb., dms., dlvd. lb. .24¼- —
Solid, 37% Pb., dms., dlvd. lb. .31¾- —
Lead nitrate, bbls. lb. .24¼- .28¼
Lead orthosilicate gel., 50-60% PbO, dms., works lb. .29¼- .34¼
Lead peroxide, tech. powd., bbls lb. .45 - .50
Lead phthalate, dibasic, dms., works. lb. .41 - —
Lead, red, 95% Pb_3O_4 or less, bbls., c.l., works, frt. equald. lb. .1425- —
bbls., l.c.l., same basis lb. .1525- —
97% Pb_3O_4, bbls., c.l., same basis lb. .1445- —
bbls., l.c.l., same basis lb. .1545- —
98% Pb_3O_4, bbls., c.l., same basis lb. .1460- —
bbls., l.c.l., same basis lb. .1560- —
Lead resinate precip. 23% Pb, dms., ton lots, dlvd lb. .43¾- —
Lead salicylate, normal dms., works lb. .46 - —
Lead silicate (see Lead white basic silicate).
Lead silicochromate, bgs., c.l., f.o.b. mfrs. point, frt. alld lb. .20 - —
bgs., l.c.l., same basis lb. .21 - —
Lead sulfate (see Lead blue basic sulfate).
Lead tallate, liq., 16% Pb, dms. lb. .17¼- —
24% Pb, dms. lb. .26¾- —
Solid, 30% Pb, dms. lb. .23¼- —
Lead, white, basic carbonate, bgs., c.l., shipt. pt., frt. alld lb. .18 - —
bgs., l.c.l., same basis lb. .19 - —
basic silicate, bgs., c.l., shipt. pt., frt. alld lb. .16½- —
bgs., l.c.l., same basis lb. .17½- —
basic silicate, bgs., c.l., shipt. pt., frt. alld lb. .17 - —
bgs., l.c.l., same basis lb. .18 - —

Lecithin, edible, tech., bleached, non-ret. dms., c.l., works. lb. .14 - .15
non-ret. dms., l.c.l., same basis lb. .15 - .16
Lecithin, edible, tech., unbleached, non-ret. dms., c.l., same basis lb. .13 - .14
non-ret. dms., l.c.l., same basis lb. .14 - .15
Lemon bioflavonoid complex, 100-lb. package, works lb. 6.45 - —
Lemon oil, USP, Calif., cns., dms. lb. 1.40 - 1.50
Messina, cns. lb. 3.25 - 4.00
Lemongrass oil, cns., dms lb. 2.00 - 2.20
dl-Leucine, dms., works lb. 12.25 - 15.00
Licorice root, gran., bls. lb. .13 - —
Powd., bls. lb. .15 - .16
Whole, bls. lb. .09 - .10
Lignaloe wood oil, Mexican, cns. lb. 2.75 - 3.50
Lignosulfonate (see under Ammonium or Sodium lignin sulfonate).
Lime, chemical (quicklime), bulk, c.l., 50,000 lbs., works, E. ton 14.25 - —
Chemical, hydrated, bgs., c.l., same basis ton 17.25 - —
spray, bgs., c.l., same basis ton 18.25 - —
For New York delivery, add $6.29 freight charge.
Lime oil, dist., Mexican, cns. lb. 5.90 - 6.75
West Indian, cns. lb. 6.50 - 7.80
Expressed, West Indian, cns. lb. 7.75 - 8.75

Lime salts (see Calcium).
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).
Linalool, ex bois de rose oil, dms. lb. 2.75 - 3.75
Syn., 93-100%, dms., works lb. 3.20 - —
Linalyl acetate, ex bois de rose, 90-92%, dms lb. 2.75 - 3.40
96-98%, dms. lb. 3.25 - —
Syn., 93-100%, dms., works lb. 3.20 - —
Lindane, 25% formulation, to distributors, dms., frt. alld. lb. 1.35 - 1.50
Lindane, tech., to formulators, 250-lb. dms., 5,000 lbs., dlvd. lb. 2.13 - —
100-lb. dms., 5,000-lbs., dlvd. lb. 2.15 - —
250-lb. dms., less than 5,000-lbs., dlvd lb. 2.18 - —
100-lb. dms., less than 5,000-lbs., dlvd lb. 2.20 - —
Linden flowers, with leaves, bls lb. .35 - .40
Without leaves, bls. lb. .42 - .45
Linseed meal, expeller, 32% bulk, Minneapolis, mills ton 61.50 - —
Extracted, 34% bulk, same basis. ton 53.00 - —
Linseed oil, raw, dms., c.l., New York lb. .1680- —
dms., l.c.l., New York lb. .1770- .1830
tanks, f.o.b. Minneapolis lb. .1320- —
tanks, New York lb. .1431- —
tankwagon, New York lb. .1481- —
Boiled linseed oil, .006c. per lb higher.
Linseed oil, acid, dist., dms. lb. .2030- —
Water-white, dms. lb. .2330- —



IN
EXCHANGE BRAND
LEMON OIL

THE DIFFERENCE IS THE SAMENESS

Batch after batch...year after year...the same full, tangy taste and aroma of real California lemon!

You get uniformity—for sure—with Exchange Brand Lemon Oil, U.S.P., California Cold Pressed.

The Exchange Brand label represents over 40 years of experience in the citrus business...and the world's largest supplies of lemons. From these stocks, lemons are picked and chosen...and skillfully pressed and bulk blended for matchless uniformity.

Every container—from 7-pound tin to 385-pound drum—is packed and sealed in a spotless, modern plant. Every drop is guaranteed to be pure, U.S.P. quality oil—unadulterated, unsophisticated. Always look for the word "Exchange" on the tamper-proof container seal.

Exchange
LEMON OIL, U.S.P.
California Cold Pressed

Sunkist Growers
PRODUCTS SALES DEPARTMENT • ONTARIO, CALIFORNIA

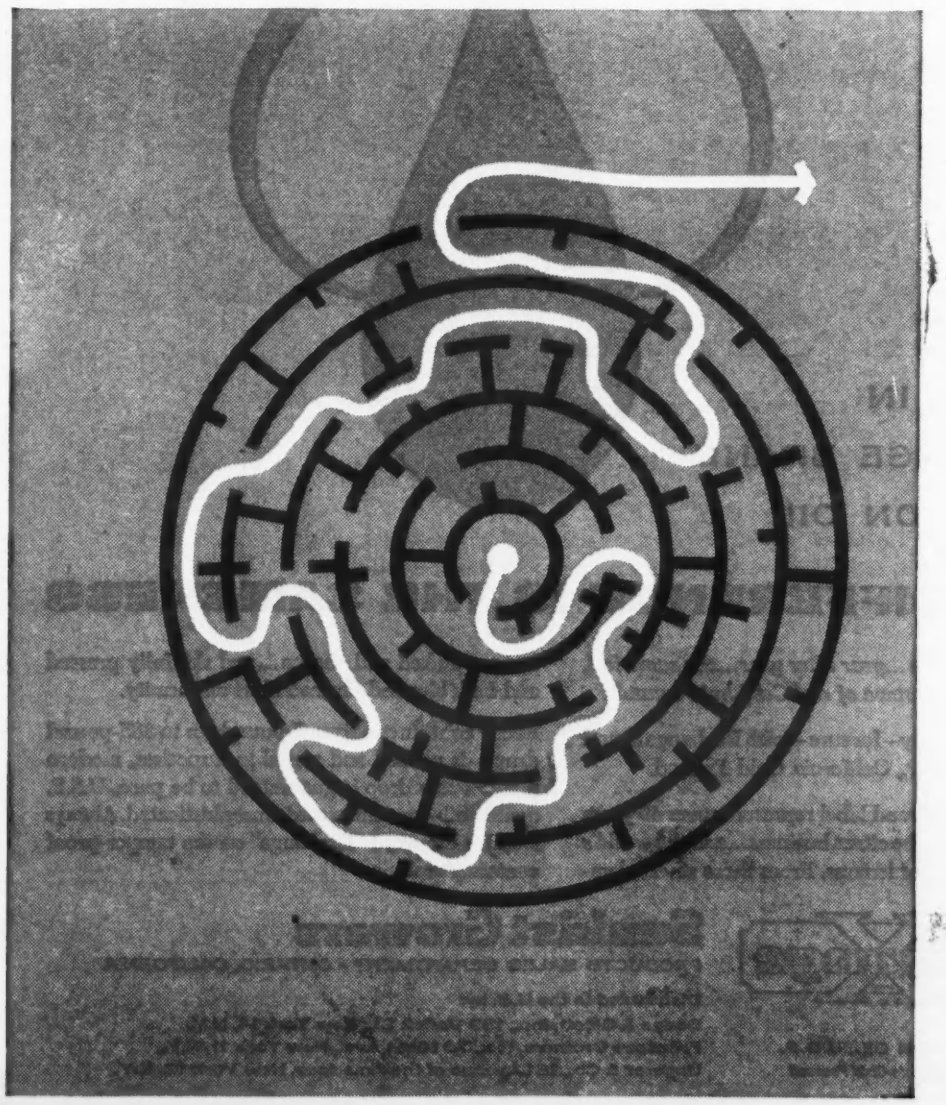
Distributed in the U.S. by:
Dodge & Olcott, Inc., 180 Varick St., New York 14, N.Y.
Fritzsche Brothers, Inc., 76 Ninth Ave., New York 11, N.Y.
Ungerer & Co., 161 Avenue of the Americas, New York 13, N.Y.

Litharge, coml., powd., bbls., c.l., works, frt. equald. lb. .1375- —
bbls, l.c.l., same basis ..... lb. .1475- —
Lithium aluminum hydride, lump, dms., works. lb.33.00 -39.00
Lithium benzoate, dms. ..... lb. 1.65 - 1.67
Lithium bromide, NF, gran., bgs., works, frt. equald. lb. 2.60 - —
Lithium carbonate, NF, dms., c.l., t.l., dlvd lb. 1.29½- —
dms., ton lots to t.l., dlvd. lb. 1.30 - 1.30½
Tech., dms., c.l., t.l., frt. alld. lb. .67 - —
dms., ton lots, same basis .. lb. .73 - —
dms., smaller lots, same basis. lb. .79 - —
Lithium chloride, CP, anhyd., dms., ton lots lb. 1.23½- —
Tech., anhyd., dms., c.l., t.l., dlvd. or works, frt. alld. lb. .87 - —
dms., l.c.l., same basis..... lb. .88 - .92
Lithium citrate, NF, dms., ton lots. lb. 1.50 - —
Lithium fluoride, dms., 20,000-lb. lots, dlvd. lb. 2.15 - —
bbls., ton lots and more, dlvd. lb. 2.18½- —
bbls., less ton lots, dlvd. ..... lb. 2.23½- —
Lithium hydride, powd., dms., 500-lbs. lots or more, works. lb. 9.50 - —
Lithium hydroxide, monohydrate, dms., c.l., t.l., frt. alld. lb. .72 - —
dms., l.c.l., frt. alld. ..... lb. .73 - —
Lithium manganite, dms., works. lb. .95 - 1.05
Lithium nitrate, tech., dms., 100-lb. lots. lb. 1.15 - 1.25
Lithium salicylate, dms. ..... lb. 1.60 - 1.70
Lithium silicate, dms., works... lb. 1.10 - 1.20
Lithium stearate, dms., c.l., works. lb. .47½- —
dms., ton lots, works ..... lb. .48½- —
dms., less-ton lots, works ..... lb. .53½- —
Lithium sulfate, dms., 100-lb. lots. lb. 1.15 - 1.25
Lithium titanate, dms., works... lb. 1.15 - 1.25
Lithol red toner, barium, bbls., works lb. .98 - —
Lithol-rubine red toner, pure, bbls., works. lb. 1.50 - —
Resinated, bbls., works..... lb. 1.47 - —
Lithopone, ord., bgs., c.l., dlvd. E. lb. .08¾- —
bgs., l.c.l., dlvd. E ..... lb. .09⅛- —
Titanated (high-strength), bgs., c.l., dlvd. lb. .11 - —
bgs., l.c.l., dlvd. ..... lb. .12 - —
Lobelia herb, bls. ..... lb. .55 - —
Lobeline sulfate, bots., 50-oz. lots, works. oz.30.00 - —
Locust bean gum, powd., bgs. .... lb. .35 - .40
Lycopodium, cs. ..... lb. 3.25 - 3.50
1-Lysine monohydrochloride, 25-lb. dms. lb. 4.95 - —

M

Mace, Siauw, No. 1, bls. ..... lb. 1.90 - —
No. 2, whole, bls. ..... lb. 1.65 - —
siftings, bls. ..... lb. 1.60 - —
Mace oil, dist., cns., dms..... lb. 9.00 -11.00
Magnesia, calcined, tech., bgs., ctns., frt. equald lb. .25¾- .26½
Tech., syn., rubber grade, light, bgs., c.l., frt. equald lb .28¾- .30
rubber grade, extra light, bgs., c.l., frt. equald. lb. .28 - —
bgs., l.c.l., frt. equald. lb. .28¾- —
Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points
Magnesia, calcined, tech., heavy, 85%, bgs., c.l., f.o.b. Lunning, New ton.39.50 - —
91%, bgs., c.l., same basis. ton.49.50 - —
95%, bgs., c.l. same basis. ton 59.00 - —
USP, light, bgs. ..... lb. .36½- .37½
USP, heavy, bgs. ..... lb. .36½- .37½
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt. equald ton.86.25 - —
Chemical grade, deadburnt, standard grain, bulk., c.l., Chawelah, Wash. ..ton.46.00 - —
Magnesium bromide, cs., jars lb. .95 - 1.00
Magnesium carbonate, tech., bgs., c.l., frt. equald. lb. .11 - —
bgs., t.l., frt. equald ..... lb. .11½- —
bgs., l.c.l., frt. equald ..... lb. .13½- .14
USP, bgs., c.l., frt equald.... lb. .13½- —
bgs., t.l., frt. equald ..... lb. .14 - —
bgs., l.c.l., frt. equald..... lb. .15 - 16
Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points.
Magnesium chloride, anhyd., 92%, flake or pebble, drums., c.l., works. lb. .12¾- —
dms., l.c.l., works ..... lb. .14 - .15
Hydrous, 99%, flake, bgs., c.l., works. ton.55.00 - —
bgs., l.c.l., works ..... ton.65.00 -80.00
Magnesium gluconate, 100-lb. dm., f.o.b. works, E lb. 1.42 - —
Magnesium hydroxide, NF, powd., dms., 500-lbs. or more, f.o.b. works lb. .24½- .25½
Magnesium lauryl sulfate, dms., c.l., frt. alld. lb. .22½- —
dms., l.t.l., frt. alld. ..... lb. .23½- —
tanks, frt. alld. ..... lb. .21½- —
Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more, works lb .36 - —
pigs, 10,000-lb. lots or more, works lb. .35¼- —
sticks, cs., works, frt. alld on carlots lb. .59 - —
Magnesium nitrate, cryst., dms., works lb. .29 - —
Magnesium oxide (see Magnesia, calcined).
Magnesium phosphate, tribasic, NF, bbls lb. .75 - —
Magnesium silicate (see Talc).
Magnesium silicofluoride, dms., works lb .10½- .12
Magnesium sulfate, tech., bgs., c.l., works. 100 lbs. 2.15 - —
bgs, l.c.l., works ..... 100 lbs. 2.90 - 3.15
USP, cryst., bgs., c.l., works. 100 lbs. 2.35 - —
bgs., l.c.l., 5,000 lbs., 1 withdrawal. 100 lbs. 3.10 - —
bgs., smaller lots..... 100 lbs. 3.35 - —
Magnesium trisilicate, USP, fib. dms., 5,000-lb. lots lb. .38 - —
fib. dms., 1,000-lb. lots..... lb. .40 - —
fib. dms., 100-lb. lots..... lb. .45 - —
Bulky and super grades of magnesium trisiclate 7c. per. lb. higher.
Malachite green, straight, PTA, bbls., works lb. 5.30 - —
Malathion, dms., c.l., works.... lb. .89 - —
dms., l.c.l., works..... lb. .92 - 1.01
Maleic acid, cryst., powd., dms lb. .37¼- —
Maleic anhydride, dms., c.l., frt. equald. lb. .23½- —
dms., l.c.l., frt. equald..... lb. .25 - —
tanks, frt. equald ..... lb. .22½- —
Malic acid, tech., dms ..... lb. .50 - —
Mandelic acid, NF, dms., 1,000-lb. lots. lb. 2.35 - —
dms., smaller lots..... lb. 2.40 - 2.50
Mandrake root, bls ..... lb. .40 - —
Manganese acetate, dms., dlvd.... lb. .35 - —
Manganese borate, tech., fib. dms. lb. .23½- —
Manganese carbonate, chemical grade, 46% Mn, bgs., 20,000-lb. lots and more, works lb. .11 - .16
Manganese chloride, CP, anhyd., dms., 20,000-lb. lots, works lb. .21¾- —
smaller lots, works ..... lb. .23½- —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross for net works ton.148.00 - —
40,000 to 99,999-lb. lots, paper bgs., same basis .... ton.144.50 - —
40,000 to 99,999-lb. lots, dms. same basis .ton.152.50 - —
Prices for manganese dioxide in 10,000 to 40,000-lb. lots, $3 per ton higher.
Manganese gluconate, dms ..... lb. 1.84 - —
Manganese hydrate, dms., dlvd lb. .35 - —
Manganese hypophosphite, NF, dms. lb. 3.52 - —
Manganese linoleate, liq., 4.35% Mn, dms lb. .35¾- —
Solid, precip., 8.2% Mn. bbls lb. .41¼ —
Manganese metal, electrolytic, dms., c.l., dlvd. E. ..... lb. .34 - —
dms., ton lots, dlvd. E..... lb. .36 - —
dms., smaller lots, dlvd. E.. lb. .38 - —
Manganese naphthenate, liq., 6% Mn, dms., frt. alld lb. .29¾- —
Manganese resinate, fused, 3½% Mn, dms. lb. .29¼- —
Precip., 6½-7% Mn, dms .... lb. .37 - —
Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd., S. E .ton.86.50 - —
bgs., l.c.l., dlvd. S. E ..ton.93.50 - —
Manganese tallate, 6%, dms..... lb. .26½- —
Manila copal gum, C, bgs. ..... lb. .35 - .39
DBB, bgs. ..... lb. .25 - .28
DK, bgs. ..... lb. No stocks.
DK, dust, bgs. ..... lb. .14 Nom.
MA, soft, bgs. ..... lb. .20 - .24
WS, bgs. ..... lb. No stocks.
Mannitol, com'l, fib. dms., ton lots, works lb. .60 - —
fib. dms., to ton lots, works. lb. .62 - —
fib. dms., single dm., works. lb. .65 - —
Marine pitch, dms. ..... lb. .04¼- .05
MBTS (see Mercaptobenzothiazyl disulfide)
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works..... lb. .26½- —
bgs., l.c.l., works ..... lb. .28 - —
Menadione, USP, bots. ..... gram. .044 - .05
Menhaden oil, crude, tanks, works, Atl. & Gulf. lb. .06¾- —
Menthol, nat., USP, Brazilian, large crystals, cs. lb. 8.50 - —
Nat., USP, Brazilian, regular crystals, cs. lb. 8.30 - 8.40
Japanese, cs. ..... lb.12.00 - —
Syn., USP, racemic, 25-lb. lots. lb. 4.25 - —
2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld. lb. .44 - —
bgs., fib. dms. less ton lots, same basis lb. .46 - —
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton lots, works, frt. alld lb. .54 - —
bgs., fib. dms., less ton lots, same basis lb. .56 - —
Mercuric chloride, NF, cryst., dms., 100 lbs., f.o.b. works lb. 4.03 - —
USP, gran. or powd., 50-lb. dm., 100 lbs., f.o.b. works lb. 3.78 - —
Mercuric cyanide, NF VIII. powd., fib. dms lb. 5.84 - —
Mercuric iodide, red, NF, 100-lb. dm., f.o.b. works lb. 6.97 - —
Mercuric oxide, red. NF IX, 50-lb. dm., 100 lbs., f.o.b. works. lb. 4.72 - —
tech., 50-lb. dm., 100 lbs., same basis lb. 4.52 - —
Mercuric oxide, yellow, NF, 50-lb. dm., 100 lbs., same basis. lb. 4.89 - —
tech., dms., 100 lbs ..... lb. 4.35 - —
Mercurous chloride (see Calomel).
Mercurous Iodide, yellow, NF, 100-lb. dm. f.o.b. works lb. 8.22 - —
Mercury, ammoniated (see White precipitate, USP XV).
Mercury metal, 76 lbs. per flask. net-flask.212.00 -215.00
Mesityl oxide, dms., c.l., dlvd.... lb. .15 - —
dms., l.c.l., dlvd. ..... lb. .16½- —
tanks, dlvd. ..... lb. .12½- —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanilic acid, dms., works .... lb. .57 - .75
Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m-Phenylenediamine).
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2,4-Tolylenediamine).
Methacrylic acid, glacial, 98%, dms., truckloads, frt. equald lb. .42½- —
dms., smaller lots, frt. equald. lb. .43 - .75
tanks, works, frt. equald lb. .40 - —
Methanol, nat, denaturing grade, tanks, frt. alld gal. .85 - —
Syn., zone 1, dms., c.l., or t.l. min., dlvd gal. .51½- —
dms., l.c.l., dlvd. ..... gal. .61½- —
tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area gal. .35 - —
tankwagon, 4,000 gal. min., dlvd gal. .30 - —
tankwagon, 4,000 gal. min., f.o.b. terminal gal. .29 - —
Methanol, syn., zone 2, dms., c.l., or t.l., min. frt. alld. or dlvd. gal. .55½- —
dms., l.c.l., works ..... gal. .65½- —
tankwagon, 2,000-4,000 gal. lots, min., dlvd., Metropolitan area gal. .39 - —
tanks, 4,000 gal. min., dlvd. gal. .34 - —

Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.



Experienced...

with fine chemicals like

MAGNESIUM TRISILICATE
(U.S.P.)

In the production of fine chemicals like *Magnesium Trisilicate* we are unexcelled in quality and experience. Our manufacturing process is continuously controlled to insure uniformity and reliability. You can be sure you are always working with the same fine chemical if it is Mallinckrodt Magnesium Trisilicate.

Mallinckrodt®

Experienced...
Over the years we have found
solutions to many problems.
Our findings are yours
when you need them.
Today we meet our standards-
tomorrow we exceed them.
After 92 years, it's a habit.

Mallinckrodt

MALLINCKRODT CHEMICAL WORKS
SECOND & MALLINCKRODT STREETS, ST. LOUIS 7, MO.
• 72 GOLD STREET, NEW YORK 8, N. Y. • CHICAGO
• CINCINNATI • LOS ANGELES
• PHILADELPHIA • IN CANADA: MALLINCKRODT
CHEMICAL WORKS, LIMITED • MONTREAL • TORONTO

Methapyrilene fumarate, 100-999 lbs., dms., f.o.b. works, frt. equald lb.21.75 • —
Methapyrilene hydrochloride, 100-999 lbs., dms., f.o.b. works, frt. equald lb.27.25 • —
Methenamine (see Hexamethylene-tetramine).
Methionine hydroxyanalogue, (calcium salt) 90% min., dms., t.l., frt. alld. lb. 1.10 • —
dms., l.t.l., same basis lb. 1.16 • —
dl-Methionine, fib. dms., frt. alld., 50-lb. or more lb. 3.50 • —
Feed grade, 98%, fib. dms., same basis lb. 1.55 • —
Methoxychlor, 50% wettable powder, dealers, dms., cs. lb. .66 • —
Methyl abietate, non-ret. dms., c.l., dlvd. zone 1 lb. .21½- —
non-ret. dms., l.c.l., same basis lb. .22 • .22½
Methyl abietate, hydrogenated, non-ret. dms., c.l., dlvd. zone 1 lb. .23½- —
non-ret. dms., l.c.l., same basis. lb. .24 • .24½

Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.

Methyl acetone, nat., dms., l.c.l., E. of Miss., frt. alld. gal. .62½- —
Methyl acetone, syn., dms., c.l., frt. alld. E. gal. .66 • —
dms., l.c.l., frt. alld. E. gal. .76 • —
tanks, frt. alld. E. gal. .51 • —

Synthetic methyl acetone E. territory comprises all states East of and including Colo., Mont., N. Mex. and Wyo. West territory is made up of all states west of those four.

Methyl acrylate, dms., c.l., t.l., dlvd. lb. .39 • —
dms., l.t.l., dlvd. lb. .40 • —
tanks, dlvd. lb. .37 • —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd. E. lb. .17 • —
dms., l.c.l., dlvd. E. lb. .18½- —
tanks, dlvd. E. lb. .14½- —
Methyl amyl alcohol, dms., c.l., dlvd. lb. .17 • —
dms., l.c.l., dlvd. lb. .18½- —
tanks, dlvd. lb. .14½- —
Methyl amyl ketone, dms., works. lb. 1.05 • —
N-Methylaniline, tech., tanks, frt. alld. lb. .60 • —
Methylanthranilate, cns. lb. 2.45 • 3.00
Methyl benzoate, cns., dms. lb. .60 • .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. alld. lb. .62 • .65
Methyl cellulose, special vis., (1,500-4,000 cps.) 50-lb. bgs., c.l., works lb. .82 • —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .89 • —
50-lb. bgs., smaller lots, frt. alld. on 100 lbs. lb. 1.05 • —
Standard vis. (15,400 cps.) 50-lb. bgs., c.l., frt. alld. lb. .69 • —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .76 • —
50-lb. bgs., smaller lots, frt. alld. on 100 lbs. lb. .79 • .82
Methyl chloride, indust., cyls., frt. equald lb. .22¼- —
tanks, multi-unit, same basis. lb. .16¼- —
tanks, single unit, same basis. lb. .12¾- —
Refrigerator mfrs., cyls., dlvd. lb. .48¾- —
Other consumers or service men, cyls., dlvd. lb. .67¾- —
Methyl chloroform (see 1,1,1-Trichloroethane).
Methyl cinnamate, cns. lb. 1.55 • 1.80
Methyl ethyl ketone, dms., c.l., dlvd. lb. .15 • —
dms., l.c.l., dlvd. lb. .16½- —
tanks, dlvd. lb. .12½- —
2-Methyl-5-ethyl pyridine, dms., c.l., works. lb. .45 • —
dms., l.c.l., works. lb. .45¾- —
tanks, works lb. .43 • —
Methyl formate, refd., dms. lb. .35 • .40
Tech., non-ret. dms., any quantity, works. lb. .10 • —
tanks, works lb. .07 • —
a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works. lb. .21 • —
100-lb. multiwall paper bgs., t.l., min. 23,000 lbs., works. lb. .21¼- —
100-lb. multiwall paper bgs., l.t.l., works. lb. .23 • —
Methyl heptin carbonate, bots. lb.28.00 -31.00
Methyl p-hydroxybenzoate, fib. dms. lb. 1.90 • 2.00
Methyl ionone, standard, cns., dms. lb. 3.40 • 3.85
Methyl isobutyl carbinol (see Methyl amyl alcohol).
Methyl isobutyl Ketone, dms., c.l., dlvd. lb. .17 • —
dms., l.c.l., dlvd. lb. .18½- —
tanks, dlvd. lb. .14½- —
Methyl methacrylate, dms., c.l., t.l., frt. equald, with Belle, W. Va. lb. .31 • —
dms., smaller lots, same basis. lb. .31½- —
tanks, same basis. lb. .29 • —
Methyl naphthyl ketone, cryst., cns. lb. 2.45 • 4.30
Methyl parahydroxybenzoate (see p-Hydroxybenzoate).
Methyl parathion, tech., 80%, dms., frt. alld. E. lb. .84 • —
Methyl parathion prices 2c. per lb. higher in West.
Methyl roseaniline chloride, NF., 5-lb. fib. dms. lb. 6.90 • —
Methyl salicylate, dms., t.l., frt. alld. lb. .60¼- —
dms., l.c.l., same basis. lb. .62½- .67½
Methyl testosterone, USP, 100-gram. bots gram. No Prices.
2-Methyl-5-vinyl pyridine, 40-dm. lots or more, f.o.b. works. lb. 1.30 • —
5-39 dm. lots, same basis. lb. 1.35 • —
tanks, same basis. lb. 1.25 • —
Methyl violet toner, molybdated, PMA, bbls., dlvd. E. of Rockies lb. 2.80 • —
Tungstated, PTMA, bbls., same basis lb. 4.35 • —
Methyl violet prices 1c. higher W. of Rockies.
Methylene blue, fib. dms., 100-lb. lots, frt. adjusted. lb. 3.25 • —
Methylene chloride, tech., straight or assorted, dms., c.l., or t.l., dlvd. lb. .13½- —
dms., l.c.l., l.t.l., dlvd. lb. .15¾- —
tanks, 4,000-gal. min., dlvd lb. .12¼- —
tanktrucks, 1,000-gal. min., dlvd. lb. .13¼- —
b-Methylnaphthalene, 32°C., m.p., dms., works lb .90 • —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-phenyl-3-methyl-pyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint, plastic, 100 mesh, bgs., c.l., works lb. .04 • —
roofing, 20 to 80 mesh, works lb. .03 • —
wet-grd., biotite, bgs., c.l., works, frt. alld.E. lb. .06½- —
bgs., l.c.l., ex-whse. lb. .07¼- —
paint or lacq., bgs., c.l., 325 mesh, works, frt. alld. E. lb. .08¼- —
bgs., l.c.l., ex-whse or freight alld. E. lb. .09 • —
Mica, wet-grd., rubber, bgs., c.l., works, frt. alld. E. lb. .08 • —
bgs., l.c.l., ex-whse. or frt. alld. E. lb. .08¾- —
wallpaper, bgs., c.l., works, frt. alld.E. lb. .08¾- —
bgs., ex-whse. or frt. alld. E. lb. .09 • —
white, 5-10 microns, bgs., c.l., works, frt. alld. E. lb. .08¼- —
Mica, wet-grd. W. of Miss. ½c. higher; W. of Rockies 1c. higher.
Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 • .11
laminating grades, tankcars, works lb. .11 • .12
Mineral black, bgs., works lb. .0160- .0673
Mineral oil, white, tech., 50-65 vis., non-ret. dms., c.l., f.o.b. refy gal. .65 • —
50-65 vis., non-ret. dms., l.c.l., basis gal. .70 • —
tankcars, refy. gal. .49 • —
65-75 vis., non-ret. dms., c.l., same basis gal. .65 • —
non-ret. dms., l.c.l., same basis gal. .70 • —
tankcars, refy. gal. .49 • —
NF, 80-90% vis., non-ret. dms., c.l., same basis gal. .66 • —
non-ret. dms., l.c.l., same basis gal. .71 • —
tankcars, refy. gal. .50 • —
NF, 135-138 vis., non-ret. dms., c.l., same basis gal. .72 • —
Mineral oil, white, NF, 135-138 vis., non-ret. dms., l.c.l., same basis gal. .77 • —
tankcars, rfy. gal. .56 • —
NF, 145-155 vis., non-ret. dms., c.l., same basis gal. 78 • —
non-ret. dms., l.c.l., same basis gal. .83 • —
tankcars, refy. gal. .62 • —
Mineral oil, white, USP, 180-190 vis., non-ret. dms., c.l., same basis gal. .80½- —
non-ret. dms., l.c.l., same basis gal. .85½- —
tankcars, refy. gal. .64½- —
USP, 200-210 vis., non-ret. dms., c.l., f.o.b. refy. gal. .82½- —
non-ret. dms., l.c.l. gal. .87½- —
tankcars, refy gal. .66½- —
USP, 340-350 vis., non-ret. dms., c.l., f.o.b. refy. gal. .87½- —
non-ret. dms., l.c.l. gal. .92½- —
tankcars, refy. gal. .71½- —

(For f.o.b N. Y. add 2c. for tankcars; 2c. for c.l., and 3c. for l.c.l. non-ret. dms.).

Mineral orange, American, bbls., c.l., works lb. .1550- —
bbls., c.l., same basis lb. .1650- —
Mineral spirits, petroleum, odorless, tankcars, New Jersey gal. .29 • —
New York gal. .305 • —
Houston, Texas gal. .25 • —
regular, tankcars, New Jersey and New York gal. .18 • —
Group 3 gal. .12875- —
Houston, Texas gal. .145 • —
Mink oil, dms. lb. 2.75 • —
Mirbane oil (see Nitrobenzene).
MNPT maroon toner, kgs., c.l., works lb. 6.30 • —
Molasses, blackstrap, feed grade, tanks, New Orleans gal. .08¼- .08¼
tanks, New York gal. .13½- —
Molybdated orange, bbls. lb. .49 • —
Molybdenum metal, powd., 80 or 200 mesh, ctns., works kilo. 7.84 • —
325 mesh, ctns., works kilo. 9.13 • —
Molybdenum trioxide, purif., dms., works lb. 1.15 • —
Tech., chemical, dms., works, basis Mo content lb. 1.48 • —
Tech., metallurgical, dms., works, basis Mo. content lb. 1.47 • —
Molybdic acid, 85%, dms., works. lb. 1.05 • 1.15
Monoallylamine, dms., c.l., dlvd. lb. .965 • —
dms., c.l., dlvd. lb. .995 • —
tanks, dlvd. lb. .96 • —

METHANOL... Large scale production controlled to the highest purity, plus over 50 years experience in the manufacture of organic chemicals, makes Heyden Newport an important source for this versatile alcohol.

District sales offices located in the nation's major distribution areas will service your methanol requirements promptly from... California, 1001 E. First Street, Los Angeles 12; 420 Market Street, San Francisco 11... Georgia, 254 Paces Ferry Road, Atlanta 5... Illinois, 20 North Wacker Drive, Chicago 6... Michigan, 10600 Puritan Avenue, Detroit 38... New Jersey, 1 Virginia Street, Newark 12... New York, Main Office, 342 Madison Avenue, New York 17... Ohio, 1433 East McMillan Street, Cincinnati 6... Pennsylvania, 7 Wynnewood Road, Wynnewood... Rhode Island, 511 Westminster Street, Providence 3... Texas, 2444 Times Boulevard, Houston 5. 1960

FINE HEYDEN CHEMICAL

HEYDEN CHEMICAL DIVISION

Heyden Newport Chemical Corp., 342 Madison Ave., New York 17, New York

HEYDEN NEWPORT

Monobutylamine, dms., c.l., dlvd. E. of Rockies	lb.	.57½-	—
dms., l.c.l., same basis	lb.	.59 -	—
tanks, same basis	lb.	.55 -	—
Mono-tert-butyl-m-cresol, dms., c.l., works	lb.	.55 -	—
dms., l.c.l., works	lb.	.56 -	—
tanks, works	lb.	.54 -	—
Mono-tert-butyl-m-cresol, dms., c.l., works	lb.	.55 -	—
dms., l.c.l., works	lb.	.56 -	—
tanks, works	lb.	.54 -	—
Monochloracetic acid, purif. (see Chloroacetic acid, mono).			
Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E	lb.	.10½-	—
dms., l.c.l., same basis	lb.	.11½-	—
tanks, same basis	lb.	.08¾-	—
Monoethanalamine, dms., c.l., dlvd. E	lb.	.27½-	—
dms., l.c.l., same basis	lb.	.29 -	—
tanks, same basis	lb.	.25 -	—
Monoethylalphanaphthylamine (see Monoethylamine, 70% aqueous, solution, dms., c.l., dlvd. E, 100% basis	lb.	.38½-	—
dms., l.c.l., dlvd. E., 100% basis.	lb.	.40 -	—
tanks, dlvd. E., 100% basis	lb.	.35 -	—
Monoethylaniline (see N-Ethylaniline).			
Monoethylorthotoluidine (see N-Ethyl-o-toluidine).			
Monoisopropanolamine, dms., c.l., dlvd. E	lb.	.27½-	—
dms., l.c.l., same basis	lb.	.29 -	—
tanks, same basis	lb.	.25 -	—
Monoisopropylamine, anhyd., dms., c.l., dlvd	lb.	.33½-	—
dms., l.c.l., same basis	lb.	.35 -	—
tanks, same basis	lb.	.31 -	—
Monomethylamine, anhyd., cyls., l.c.l., frt. equald., 100% basis	lb.	.30 -	—
tanks, 100% basis	lb.	.26 -	—
30-35% soln., dms., c.l., frt. equald., 100% basis	lb.	.36 -	—
Monomethylamine, 30-35% soln., dms., l.c.l., frt. equald, 100% basis	lb.	.36½-	—
tanks, frt. equald., 100% basis.	lb.	.26 -	—
40% soln., dms., frt. equald., 100% basis	lb.	.33 -	—
dms., l.c.l., frt. equald., 100% basis	lb.	.33½-	—
tanks, frt. equald, 100% basis.	lb.	.26 -	—
Monopentaerythritol, tech., bgs., c.l., dlvd. E	lb.	.31 -	—
bgs., l.c.l., dlvd. E	lb.	.32 -	—
Monopotassium glutamate, dms., 1,000-lb. lots, frt. alld.	lb.	3.05 -	—
dms., 100-lb. lots, same basis	lb.	3.25 -	—
Monosodium glutamate, dms., dlvd.	lb.	1.07 -	1.15
Monosodium phosphate (see sodium phosphate, monobasic).			
Montan wax, Calif., refd., bgs	lb.	.27 -	.28
Imp., crude, Bohemian, bgs	lb.	.21 -	.22
German, bgs	lb.	.26 -	.27
Morphine, cns., 100-oz., f.o.b. works	oz.	12.35 -	—
Morphine hydrobromide, cns., 100-oz., f.o.b. works	oz.	9.90 -	—
Morphine hydrochloride, NF, cns., 100-oz., f.o.b. works	oz.	9.90 -	—
Morphine sulfate, USP, cns., 100-oz., f.o.b. works	oz.	9.90 -	—
Morpholine, dms., c.l., dlvd. E	lb.	.55¼-	—
dms., l.c.l., dlvd. E	lb.	.56¼-	—
tanks, dlvd. E	lb.	.52¾-	—
Muriatic acid (see Hydrochloric acid).			
Musk, syn., ambrette, fib. dms., 100-lb. lots	lb.	4.40 -	4.90
cns., 25-lb. lots	lb.	4.50 -	5.00
Ketone, fib. dms., 100-lb. lots	lb.	4.60 -	5.10
cns., 25-lb. lots	lb.	4.70 -	5.20
Xylol, fib. dms., 100-lb. lots	lb.	1.26 -	—
cns., 25-lb. lots	lb.	1.40 -	—
Mustard seed, Danish, yellow, bgs.	lb.	.11½-	—
Montana, yellow, bgs	lb.	.10½-	—
Oriental, bgs	lb.	.08 -	—
Mustard, oil, syn., bots	lb.	1.60 -	1.85
Myristic acid, bgs.	lb.	.30 -	.32½
tanks	lb.	.29 -	—
Myrrh gum, cs	lb.	.65 -	.75

N

Naphtha, high solvency (see Solvent naphtha, petroleum).			
Naphtha, petroleum, cleaner's (see Cleaner's naphtha).			
Naphtha, VM&P, petroleum, tank-cars, New Jersey and New York	gal.	.19 -	—
Group 3	gal.	.13875-	—
Houston, Texas	gal.	.155 -	—
Naphthalene, crude, dom., 78°, tanks, frt. equald	lb.	.05 -	.06
imp., 78°, bgs., large lots	lb.	.09½	Nom.
Refd., indust., chipped, crushed, bgs., frt. equald	lb.	.12½-	—
tanks, same basis	lb.	.09¾-	.10¾
Naphthalene, refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis.	lb.	.15½-	—
cs., 50 lbs., c.l., same basis.	lb.	.15¾-	—
1-lb. pkgs., c.l., same basis.	lb.	.18½-	—
a-Naphthol, dms., frt. alld.	lb.	1.00 -	—
b-Naphthol, tech., flake, bbls., c.l., works	lb.	.34 -	—
bbls., l.c.l., works	lb.	.36 -	—
Naphthol, ITR, red toner, bbls., works	lb.	5.00 -	—
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid).			
1-Naphthol-4 sulfonic acid (see Nevile and Winther's acid).			
1-Naphthol-5-sulfonic acid (see L acid).			
1-Naphthol-5-sulfonic 8-amino acid (see S acid).			
2-Naphthol-6,8-disulfonic acid (see Gamma acid).			
Naphthol sulfonic mixed acid (see Cleve's acid).			
a-Naphthylamine, dms., frt. alld.	lb.	.50 -	—
b-Naphthylamine, tech., flake, bbls., works	lb.	1.60 -	—
1-Naphthylamine-5-sulfonic acid (see Laurent's acid).			
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).			
2-Naphthylamine-1-sulfonic acid (see Tobias acid).			
2-Naphthylamine-6-sulfonic acid (see Broenner's acid).			
2-Naphthylamine-7-sulfonic acid (see F acid).			
Naringin, fib. dms.	lb.	8.50 -	—
Neatsfoot oil, 15° cold test, dms.	lb.	.29	Nom.
20° cold test, dms.	lb.	.28	Nom.
30° cold test, dms.	lb.	.27	Nom.
Neocinchophen, USP, dms., frt. adjusted	lb.	7.00 -	8.00
Neomycin sulfate, fib. dms., 1-kilo basis activity	gram.	.25 -	—
fib. dms., 100-999-gram lots, basis activity	gram.	.30 -	—
Tech., fib. dms.	gram.	.13½-	—
Neopentylglycol, dms., c.l., dlvd.	lb.	.32 -	—
dms., l.c.l., same basis	lb.	.33 -	—
Nerol, dms.	lb.	4.75 -	—
Neroli oil, NF, French, bots	lb.	425.00 -	575.00
Tunisian, bots.	lb.	400.00 -	—
Nerolin, cns.	lb.	2.45 -	2.85
Neville and Winther's acid, dms., frt. alld.	lb.	1.30 -	—
Niacinamide (see Nicotinamide).			
Nickel acetate, bbls., dlvd.	lb.	.68½-	.75½
Nickel carbonate, bbls., dlvd.	lb.	78¼-	.85¼
Nickel chloride, bbls., dlvd.	lb.	.37 -	.45
Nickel formate, bbls., ton lots, frt. alld.	lb.	.72 -	.73
Nickel metal, electro cathodes, cs., works	lb.	.74 -	—
Nickel nitrate, dms., frt. alld.	lb.	.31½-	.33½
Nickel oxide, black, bbls.	lb.	.85 -	—
Green, bbls.	lb.	.84 -	—
Nickel sulfate, bgs., c.l., dlvd.	lb.	.28 -	—
bgs., l.c.l., dlvd.	lb.	.28½-	.36
Nicotinamide, USP, 50-kilo., dms., 100 kilos., dlvd	kilo.	6.50 -	—
dms., less than 100 kilos, dlvd.	kilo.	6.60 -	7.00
Nicotine sulfate, 40%, dealers, 50-lb. dms. frt. alld	lb.	1.20 -	—
40%, manufacturers, 500-lb. dms., frt. alld	lb.	1.05 -	—
Nicotinic amide, USP (see Nicotinamide).			
Niger seed, bgs.	lb.	.10¼-	—
Nikethamide, cbys.	lb.	5.00 -	—
Nitric acid, 36° Be., cbys., c.l., works E	100 lbs.	5.75 -	—
cbys., l.c.l., works E	100 lbs.	6.05 -	6.85
38° Be., cbys., c.l., works E.	100 lbs.	6.25 -	—
cbys., l.c.l., works E	100 lbs.	6.55 -	7.35
40° Be., cbys., c.l., works E.	100 lbs.	6.75 -	—
cbys., l.c.l., works E	100 lbs.	7.05 -	7.85
42° Be., cbys., c.l., works E.	100 lbs.	7.25 -	—
cbys., l.c.l., works E	100 lbs.	7.55 -	8.35
58.5 to 68%, HNO_3, tanks, works, 100% basis	100 lbs.	3.90 -	—
94¼ to 95½% HNO_3, tanks, works, 100% basis	100 lbs.	4.90 -	—
CP, NF, consumer, cbys., extra, c.l., works	lb.	.18½-	—
cbys., extra, l.c.l., works.	lb.	.20 -	—
5-pint bots., extra, cs., c.l., same basis	lb.	.22½-	—
5-pint bots., extra, cs., l.c.l., same basis	lb.	.24 -	.25
dms., frt. alld.	lb.	.99 -	—
m-Nitroaniline, cryst., dms., frt. alld.	lb.	1.15 -	—
Paste, dms., frt. alld., 100% basis.	lb.	1.10 -	—
o-Nitroaniline, flaked, dms., t.l., frt. alld.	lb.	.49 -	—
dms., l.t.l., frt. alld.	lb.	.51 -	—
o-Nitroaniline orange toner, kgs.	lb.	1.35 -	—
p-Nitroaniline, dms., frt. alld.	lb.	.445 -	—
o-Nitroanisole, tech., tanks, frt. alld.	lb.	.36 -	—
p-Nitroanisole, tech., solid, dms., frt. alld.	lb.	.72 -	—
Nitrobenzene, dbl. dist., dms., c.l., frt. alld.	lb.	.13 -	—
dms., l.c.l., frt. alld.	lb.	.14 -	—
tanks, frt. alld.	lb.	.11 -	—
p-Nitrobenzoic acid, dms., c.l., works	lb.	.63 -	—
4-Nitro-2-aminophenol, tech., paste, dms., l.c.l., works	lb.	.64 -	—
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175 seconds. bbls., c.l., works	lb.	.37½-	—
bbls., l.c.l., same basis	lb.	.33½-	.40½
18-20, cps., bbls., c.l., same basis	lb.	.39½-	—
bbls., l.c.l., same basis	lb.	.40½-	.42½
250-400, 600-1,000 seconds, bbls., l.c.l., same basis	lb.	.43 -	.48
Nitrocellulose, spirit soluble, 30-35 cps., ¼, ½ seconds, bbls., c.l., same basis	lb.	.43 -	—
bbls., l.c.l., same basis	lb.	.44 -	.48
5-6 cps., 40-60 seconds, bbls., c.l., same basis	lb.	.42 -	—
bbls., l.c.l., same basis	lb.	.43 -	.45

Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.

When it comes to

MINERAL ACIDS

SULFURIC ACID
Standard: 60° and 66° Baumé, 99% H_2SO_4
Diamond: 66° Baumé
Reagent, ACS

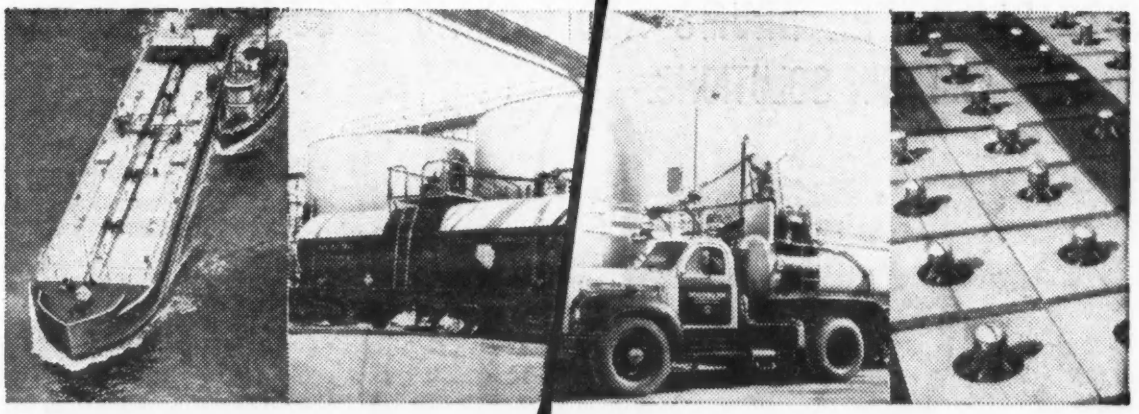
NITRIC ACID
Diamond: 36°, 38°, 40°, and 42° Baumé
Strong Nitric Acid, 95% and fuming grades
Photo-Engravers' Grade
Reagent, ACS

MURIATIC (Hydrochloric) ACID
18°, 20° and 22° Baumé, Standard, Diamond, Crystal and Reagent Grades

HYDROFLUORIC ACID
Anhydrous, Aqueous 70%, and Reagent

PHOSPHORIC ACID
Wet Process, 65% and 75%, Com'l and Fertilizer Grades
Food Grade, 75%
N.F., 85%

MIXED ACID
Varying proportions of Nitric and Sulfuric Acids to meet customers' requirements



Come to

GENERAL CHEMICAL

For 60 years, General Chemical has been the nation's primary producer of heavy acids. General has its own basic raw material sources. Its production facilities include 21* sulfuric plants, 4* hydrofluoric plants, 3 nitric and 3 muriatic acid plants. It operates one of the nation's largest fleets of tank cars, tank trucks and acid-carrying barges, and distributes from key points coast-to-coast. General's production, transportation, service and sales facilities are geared to meet your requirements best, both in quality of product and dependability of service. Write or phone today for information or service.

Basic to America's Progress

Allied Chemical

GENERAL CHEMICAL DIVISION
40 Rector Street, New York 6, N. Y.

*In Canada: Allied Chemical Canada, Limited

o-Nitrochlorobenzene, dms., c.l., frt. alld lb. .15 - —
dms., l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Nitrochlorobenzene, dms. lb. .26 - .27
2-Nitfo-p-cresol, tech., dms., dlvd lb. .88 - —
Nitroethane, dms., c.l., dlvd. E lb. .25 - —
dms., l.c.l., dlvd. E lb. .26½- —
tanks, dlvd E lb. .22½- —
Nitroethane prices West of Rockies are 1c. higher.
Nitrogen solutions, tanks, frt. equald. N unit. 1.28 - —
Nitrogen tetroxide, indust., tankcars, f.o.b. Hopewell, Va lb. .065 - —
Cyls., t.l., min. 5 tons, same basis lb. .07½- —
Cyls., l.c.l., l.t.l., same basis lb. .15 - —
Nitrogenous process tankage, bulk, works unit-ton. 4.50 - 5.00
Nitrogenous sewage sludge, bulk, f.o.b. Chicago, works. unit-ton. 3.50 - .50
Nitromethane, dms., t.l., dlvd. E lb. .25 - —
dms., l.t.l., dlvd. E lb. .26½- —
Nitromethane prices West of Rockies are 1c higher.
a-Nitronaphthalene, bbls., frt. alld. lb. .31 - —
o-Nitrophenol, dms., works, frt. equald lb. .94 - —
p-Nitrophenol, dms., c.l., frt. alld. lb. .45 - —
dms., l.c.l., frt. alld lb. .47 - —

1-Nitropropane, dms., c.l., frt. alld. E. of Rockies lb. .23½- —
dms., l.c.l., same basis lb. .25 - —
tanks, same basis lb. .21 - —
2-Nitropropane, dms., c.l., frt. alld. E of Rockies lb. .18½- —
dms., l.c.l., same basis lb. .20 - —
tanks, same basis lb. .16 - —
Nitropropane prices West of Rockies are 1c. per lb. higher.
m-Nitrotoluene, tech., dms., frt. alld. lb. .50 - —
o-Nitrotoluene, dms., c.l., frt. alld lb .15 - —
dms., l.c.l., frt alld. lb. 16 - —
tanks, frt. alld. lb. .13 - —
p-Nitrotoluene, tech., cast, dms., c.l., works lb. .27½- —
dms., l.c.l., works lb. .28 - —
flake, dms., c.l., t.l., works lb. .27½- —
dms., l.c.l., works lb. .28 - —
m-Nitro-p-toluidine, dms. lb. 1.25 - —
Nonylphenol, dms., c.l, frt. alld. lb. .22 - —
dms., l.c.l., frt. alld lb. .23 - —
tanks, frt. alld. lb. .19½- —
Nonylphenol prices on shipments to Western States are 2c. higher.
Nutmegs, East Indian, whole, bgs. lb. 1.36 - —
West Indian, bgs. lb. 1.45 - —
Nutmeg oil, USP, dist., East Indian, cns. lb. 9.00 -12.00
West Indian, cns. lb. 9.00 -12.00
Nux vomica, bls. lb. .20 - —
Powd., bbls., bxs. lb. .20 - .22

O

Ocher (see Iron oxide yellow, nat.).
Ocotea cymbarum oil, dms lb. .48 - .55
Octane, indust., tanks, Bayonne, N.J. gal. .20 - —
Borger, Tex. gal. .15¾- —
1-Octanol, tech., dms., c.l., dlvd., Zone 1 lb. .43½- —
dms., l.c.l., dlvd. Zone 1—lb. .45½- —
tanks, dlvd., Zone 1 lb. .41 - —
Octyl alcohol, perfumers grade, bots. lb. 1.60 - 3.25
Octyl alcohol, tech, (see 1-Octanol, tech).
tert-Octylamine, dms., c.l., t.l., f.o.b. works lb. .54½- —
dms., l.c.l., same basis lb. .55 - —
Octyl phenol, bgs., c.l., works lb. .22 - —
bgs., l.c.l., works lb. .22½- —
tanks, works lb. .21 - —
Octyl phenol in dms., 11c. higher.

OILS

Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liq., dms. lb. .16 - .16½
tanks lb. .14 - —
Oleic acid, dbl.-dist. (white), dms. lb. .17½- .20
tanks lb. .15 - —
S.d., dms. lb. .16¼- .18¾
tanks lb. .13¾- —
Oleo oil, extra, dms lb. .14 - .14¼
Oleostearine, dms. lb. .12½- .12¾
Oleum (see Sulfuric acid, fuming).
Olibanum gum, siftings, cs lb. .15 - .20
Tears, cs. lb. .22 - .30
Olibanum oil, bots lb. 5.00 - 7.65
Extra fine, bots lb. 8.00 - 9.50
Olive oil, edible, dms., spot, duty-paid gal. 2.40 - 2.50
Olivine, crude, works ton.12.00 - —
20 mesh, works ton.15.00 - —
100 mesh works ton.20.00 - —
Opium, USP, cns., 25-lbs., f.o.b. works oz.19.20 - —
gran., cns., 50 lbs., same basis. oz.21.65 - —
powd., cns., 50 lbs., same basis. oz.21.65 - —
Orange oil, sweet distilled, Calif., cns., dms lb. .60 - —
Florida, cns., dms lb. .35 - —
Expressed, Calif., cns., dms lb. .70 - .90
Florida, cns., dms lb. .45 - .50
Messina, cns. lb. 3.25 - 5.00
West Indian, bitter, cns., dms. lb. 2.50 - 3.25
Orange peel, bitter, Haitian, bls lb. .18 - .20
Sweet lb. .28 - .30
Origanum oil, Spanish, cns lb. 1.80 - 2.30

ORANGE PIGMENTS

Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

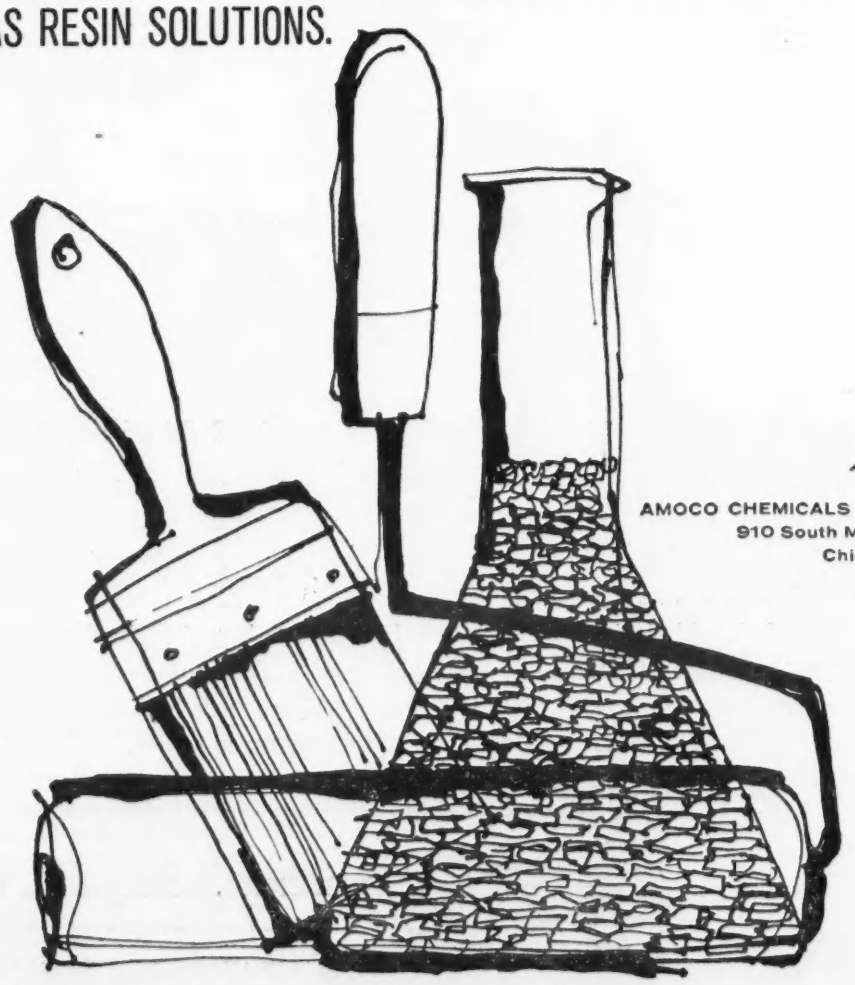
Orris root, Florentine, bls lb. .55 - —
powd., bbls., bxs lb. .65 - —
Verona, bls lb. .35 - —
powd., bbls., bxs lb. .45 - —
Orthoanisidine (see o-Anisidine).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid (see o-Chlorobenzoic acid).
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine).
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary amylphenol (see o-tert-Amylphenol).
Orthotolidine (see o-Tolidine base).
Orthotoluidine (see o-Toluidine).
Ouabain, USP, bots. gram. 3.00 - 4.00
Curicury wax, crude, bgs lb. .56 - .58
Refd., pure, bgs lb. .64 - .66
Oxalic acid, bgs., dms., c.l., works. lb. .18 - .18½
bgs., dms., 10,000-lb. lots, works. lb. .18¼- .18¾
bgs., dms., smaller lots, works. lb. .19¼- .19¾
b-Oxynaphthoic acid, pigment manufacture, dms., frt. alld lb. .912 - —
Dyestuff manufacture, dms., same basis lb. 1.03 - 1.14
Oxyquinolin sulfate, cns., 100-lb. lots, works lb. 4.75 - 5.00
cns., smaller lots, works lb. 4.92 - 5.17

P

Palm oil, clarif., dms. lb. .14 - .15
tanks lb. .1170- —
Palm oil acid, dist., dms. lb. .15¾- .19¼
tanks lb. .13¾- .14¼
Palmarosa oil, cns. lb. 4.45 - 6.00
Papain, powd., bots. lb. 5.50 -10.00
Papaverine hydrochloride, nat. or syn., USP, cns., 25-oz. to 100-oz. lots oz. 5.00 - —
cns., smaller lots oz. 5.05 - 5.20
Papaverine sulfate, nat. or syn., USP, cns oz. 7.10 - 7.35
Paprika, Bulgarian, bgs. lb. .25 - —
Hungarian, bgs. lb. .29 - —
Spanish, bgs. lb. .38 - —
Yugoslavian, bgs. lb. .29 - —
Para-aminobenzoic acid (see p-Aminobenzoic acid).
Parachlorobenzoic acid (see p-Chlorobenzoic acid).
Paramethylphenylcinchonic acid (see Neocinchophen).
Paranitrobenzoic acid (see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline).
Para-anisidin (see p-Ansidine).
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner, red, bbls. lb. 1.21 - —
Chlorinated, kgs. lb. 1.36 - —
Paraffin, crude, scale, white, 123°-127° F., ASTM, tanks, refy. lb. .0655- —
Paraffin, fully refd., 122°-124°F., ASTM, tanks, refy lb. .0765- —
125°-127° F., ASTM, tanks, refy. lb. .0765- —
130°-132° F., ASTM, tanks, refy. lb. .0765- —
132°-134° F., ASTM, tanks, refy. lb. .0765- —
135°-137° F., ASTM, tanks, refy. lb. .0765- —
AMP temperatures are an arbitrary 3° F. higher than ASTM.
Paraffin oil, pale, 100-110 vis., at 100° F., tanks east coast refy gal. .14 - —
Paraffin wax (see Paraffin).
Paraformaldehyde, 91%, flake, bgs., c.l., frt. alld lb. .10 - —
bgs., l.c.l., frt. alld lb. .12 - .13
91% powd., bgs., c.l., ex whse lb. .1715- —
bgs., l.c.l., ex whse lb. .1865- —
USP-X, fib. dms., c.l. lb. .19 - —
fib. dms., 1,000-lb. lots lb. .20 - —
fib. dms., smaller lots lb. .21½- —
Paraldehyde, tech., 98%, 55-gal. dms., t.l., dlvd lb. .14 - —
55-gal. dms., l.c.l., dlvd lb. .15 - —
tanks, dlvd. lb. .11½- —
Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene).
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine).

AMOCO PANAREZ HYDROCARBON RESINS

SIX TOP QUALITY SOLID HYDROCARBON POLYMERS TO HELP YOU MAKE BETTER: SURFACE COATINGS (ALKYD, OLEORESINOUS, RUBBER BASE, METALLIC) • RUBBER PRODUCTS • FLOOR TILE • ADHESIVES • CONCRETE CURING COMPOUNDS. ALL GRADES AVAILABLE IN 435 LB. (APPROX.) STRIPPABLE STEEL DRUMS AND FLAKED IN 50 LB. BAGS. ALSO AVAILABLE AS RESIN SOLUTIONS.



AMOCO CHEMICALS

AMOCO CHEMICALS CORPORATION
910 South Michigan Avenue
Chicago 80, Illinois

Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).
Parathion, ethyl, dms., frt. alld lb. .84 - —
Parathion prices 2c. per lb. higher in West.
Paratoluenesulfonamide (see p-Toluenesulfonamide).
Paris green, dealers, 100 lb. dms., frt. alld lb. .45 - —
Passion flower herb, bls. lb. .45 - .50
Patchouli oil, imp., cns. lb. 5.50 - 6.50
Peach kernel oil, USP (see Apricot kernel oil).
Peacock blue, fugitive, 100% color strength, 250-lb. bbls., dlvd. E. of Rockies lb. 1.00 - —
Peacock blue price 1c. higher W. of Rockies.
Peanut meal, 45%, bgs., f.o.b. mills ton 50.00 - 52.50
Peanut oil, crude, tanks, f.o.b. mills. lb. .16 - —
Refd. dms. lb. .21¼- .21½
tanks lb. .19¼- —
Pectin, dom., NF, citrus, powd., bbls. lb. 2.05 - 2.06
Dom., tech., powd., 150 jelly grade, bbls lb. 1.28 - —
Imp., Danish, bbls., ex whse lb. 1.28 - —
Pelargonic acid, dms., c.l., dlvd lb. .25 - —
ton lots, same basis lb. .27½- —
tanks, same basis lb. .23½- —
Penicillin, potassium, cryst., bulk, 1,000,000 units. .021 - —
Penicillin, procaine, cryst., bulk, 1,000,000 units. .023 - —
Pennyroyal oil, USP, imported, cns. lb. 2.25 - 3.10
Pentachlorophenol, bgs., c.l., t.l., works, frt. equald lb. .21 - —
bgs., l.c.l., same basis lb. .22½- .29
Pentachlorophenol in dms. 1c. higher.
Pentaerythritol, tech., bgs., c.l., dlvd lb. .31 - —
bgs., l.c.l., dlvd. lb. .32 - —
Pentaerythritol, di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust., tanks, Tex. refy. gal. .14 - —
Pentobarbital, dms., 100 lbs. or more lb. 6.00 - —
Pepper, black, Malabar, bgs lb. .58 - —
Lampong, bgs. lb. .58 - —
Red, Funtuas, bgs. lb. .32 - —
Japanese, Hontoka, bgs. lb. .37½- —
Santaka, bgs. lb. .31½- —
Sudanese, bgs. lb. .36 - —
White, Muntok, bgs lb. .78 - —
Peppermint leaves, dom., USP, bls., dms lb. .70 - .75
Imp., USP, bls. lb. .85 - —
Peppermint oil, nat., dms. lb. 4.00 - 4.60
Redist., USP, dms. lb. 4.25 - 5.25
Perchloroethylene, dms., c.l., or t.l., dlvd lb. .13½- —
dms., l.c.l., dlvd. lb. .15¼- —
tanks, dlvd. lb. .11¾- —
tanktruck, 1,000 gal. min. dlvd lb. .12¼- —
Peri acid, dry, bbls., frt. alld lb. 1.60 - —
Paste, bbls., frt. alld lb. 1.55 - —
Peru balsam, dms. lb. 1.10 - 1.50
Persic oil, USP (see Apricot kernel oil).
Petitgrain oil, South American, cns., dms lb. 2.50 - 3.25
Petrolatum, cream, dms., c.l., refy. lb. .08125- —
dms., l.c.l., dlvd. lb. .10125-.11375
tanks, refy. lb. .05875- —
Extra amber, dms., c.l., refy lb. .07125- —
dms., l.c.l., dlvd. lb. .09125-.10375
tanks, refy. lb. .04875- —
Petrolatum, lily white, dms., c.l., refy lb. .08625- —
dms., l.c.l., dlvd. lb. .10625- .12
tanks, refy. lb. .06735- —
USP, snow white, dms., c.l., refy. lb. .09125- —
dms., l.c.l., dlvd lb. .11125- .125
tanks, refy. lb. .06875- —
Petrolatum, USP, soft yellow, dms., c.l., refy lb. .07125- —
dms., l.c.l., dlvd. lb. .095 - .10375
tanks, refy. lb. .04875- —
Petroleum pitch (see Asphalt, petroleum).

PETROLEUM PRODUCTS
Petroleum product quotations are listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works. lb. .16½- .18¾
non-ret. dms., l.c.l., works lb. .17½- .19
tanks, works lb. .14½- .17
50-55% sulfuric content, non-ret. dms., c.l., works lb. .16 - —
non-ret. dms., l.c.l., works lb. .17 - —
tanks, works lb. .13 - —
o-Phenetidine, dms., c.l., frt. alld. E lb .91 - —
dms., l.c.l., same basis lb. .93 - —
p-Phenetidine, dms., c.l., frt. alld. lb. 1.05 - —
dms., same basis lb. 1.08 - —
Phenobarbitol, USP, dms., 100-lbs., frt. alld lb. 3.25 - —
Phenobarbital-Sodium (see sodium phenobarbital).
Phenol, 90-92% (cresol 8-10%), non-ret. dms., frt. alld. E. of Rockies lb. .16¾- —
non-ret. dms., l.c.l., same basis. lb. .17¾- —
tanks, same basis lb. .14¾- —
82-84% (cresol 16-18%) non-ret. dms., c.l., same basis lb. .16½- —
non-ret dms., l.c.l., same basis. lb. .17½- —
tanks, same basis lb. .14½- —
30°C., or above, tar dist., non-ret. dms., c.l., same basis lb. .18 - —
Phenol, 30°C., or above, tar dist., non-ret. dms., l.c.l., same basis. lb .19 - —
tanks, same basis lb. .16 - —
USP, syn., dms., c.l., t.l., frt. alld lb. .18½- —
dms., same basis lo. .20½- —
tanks, same basis lb. .16½- —
Phenolphthalein, USP or yellow, 250-lb. dm., 2,000 lbs., frt. alld lb. 1.30 - —
250-lb. dm., same basis lb. 1.35 - —
Phenothiazine drench, fib. dms., t.l., dlvd lb. .44 - —
fib. dms., l.t.l., same basis lb .47 - —
NF, fib. dms., t.l., same basis lb. .43 - —
fib. dms., l.t.l. same basis lb. .46 - —
Phenyl acetate, dms., 100-lb. lots, works lb. .50 - —
Phenyl salicylate (see Salol).
Phenylacetaldehyde, soln., 50%, bots. lb. 2.35 - —
100%, bots. lb. 4.00 - 4.65

Phenylacetic acid, pure, cryst., cns. lb. 1.25 - 1.75
dl-Phenylalanine, dms., works lb. 27.00 - 37.50
l-Phenyl-3-carbethoxy pyrazolone-5, fib. dms., 200-lb. lots, dlvd. E. lb. 3.45 - —
fib dms., smaller lots, dlvd. E. lb. 3.80 - —
N-Phenyldiethanolamine, dms., c.l., dlvd. E. lb. .41 - —
dms., l.c.l., dlvd. E. lb. .42½- —
tanks, dlvd. E. lb. .38½- —
m-Phenylenediamine, dms., frt. alld. lb. 1.10 - —
o-Phenylenediamine, coml, fib. dms, 100 to 1,000 lbs., works. lb. 1.70 - 1.80
p-Phenylenediamine, tech., dms, works lb. 1.55 - —
Phenylethanolamine, dms., c.l., works lb. .75½- —
dms., l.c.l., same basis lb. .77 - —
Phenylethyl acetate, bots. lb. 1.25 - 1.40
2-Phenylethyl alcohol, extra dms. lb. 1.14 - 1.50
Standard, dms. lb. 1.10 - 1.60
b-Phenylethylamine, dms., 20,000 lbs. or more, frt. alld lb. 1.50 - —
dms., smaller lots, frt. alld lb. 1.70 - 1.85
Phenylethylphenyl acetate, bots lb. 4.00 - 4.25
Phenylglyconic acid (see Mendelic acid).
Phenylhydrazine, 97%, 450-lb. dms. lb. 1.45 - —
1-Phenyl-3-methyl pyrazolone-5, fib. dms., 250-lb. lots, dlvd. E. lb. 1.80 - —
fib. dms., smaller lots, dlvd. E lb. 2.10 - —
o-Phenylphenol, dms., l.c.l., works. lb. .48 - .50
p-Phenylphenol, bgs., c.l., works lb. .38½- —
bgs., l.c.l., works lb. .43 - —
Philippine copal gum, pale, chips, bgs lb. .23¾- .26
nubs, bgs. lb. .33¼- .37
seeds, bgs. lb. .20 Nom.
sorts, bgs. lb. .20 - .24
Phloroglucinol, coml., fib. dms., works lb. 6.40 - —
CP, bots., works lb. 17.75 - —
Tech., fib. dms., works lb. 10.45 - —
Phloxin red toner (see Eosin red toner).
Phosgene, ret. cyls., works lb. .15½- —
Phosphate, defluorinated (see under D).
Phosphate rock, Curacao, Atlantic ports, New Orleans ton. 48.00 - —
Phosphate rock, Florida, land pebble, run-of-mine, washed, dried, unground, 66-68%, b.p.l., bulk, c.l., mines. short-ton. 4.798 - —
68-70%, b.p.l., bulk, c.l., same basis short-ton. 5.148 - —
70-72%, b.p.l., bulk, c.l., same basis short-ton. 5.728 - —
74-75%, b.p.l., bulk, c.l., same basis short-ton. 6.628 - —
76-77%, b.p.l., c.l., bulk, same basis short-ton. 7.518 - —
Above Florida prices are based on fuel oil at $2.37 per bbl. and labor at $1.59.
Phosphoric acid, food grade, 75%, cbys., c.l., works, E., frt. equald 100 lbs. 7.00 - —
cbys., l.c.l., same basis 100 lbs. 7.25 - 7.75
tanks, t.w., works 100 lbs. 5.60 - —
80%, cbys., c.l., frt. equald 100 lbs. 7.85 - —
cbys., l.c.l., works 100 lbs. 8.10 - 9.35
tanks, t.w., works 100 lbs. 6.00 - —
NF, 85%, cbys., c.l., works. 100 lbs. 8.50 - —
cbys., l.c.l., works 100 lbs. 8.75 - 9.00
tanks, t.w., works 100 lbs. 6.65 - —

Phosphorus, amorph., red, dms., t.l., works lb. .55 - —
dms., smaller lots, works lb. .56 - .57
white (yellow), solid, dms., c.l., works, frt. equald lb. .20 - .20¼
dms., l.c.l., works, frt. equald lb. .21½- —
tanks, works, frt. equald. lb. .19 - —
Phosphorus oxychloride, dms., c.l., works lb. .14 - —
dms., l.c.l., works lb. .15 - —
tanks, works, frt. equald lb. .12½- —
Phosphorus pentasulfide, powd., dms., c.l., works lb. .13½- —
dms., l.c.l., works lb. .14½- .15¼
Solid, dms., c.l., works lb. .11½- —
dms., l.c.l., works lb. .12½- .13½
Phosphorus pentoxide, dms., c.l., works lb. .1375- .1475
dms., l.c.l., works lb. .1475- .1675
Phosphorus sesquisulfide, dms., cs., c.l., works lb. .38 - —
dms., l.c.l., works lb. .39 - .40
Phosphorus trichloride, dms., c.l., works lb. .14 - —
dms., l.c.l., works lb. .15 - —
tanks, works lb. .12½- —
Phthalic anhydride, bgs., c.l., works, frt. equald lb. .17 - .21
bgs., l.c.l., same basis lb. .18 - .22
tanks, same basis lb. .16½- .20¼
Phthalimide, 97-98%, dms., frt. alld lb. .65 - —

Basic Chemicals From Reichhold

FORMALDEHYDE_
An important raw material in the manufacture of resins, adhesives, textiles, leather, rubber and numerous other products. It is marketed by RCI in five different concentrations.

METHANOL_
A widely used solvent and chemical intermediate for the manufacture of formaldehyde, rocket fuels, amines and esters.

PENTACHLOROPHENOL_
Used in various fungicides, bactericides, algicides and herbicides; in agriculture, lumber, pulp and paper applications.

PHENOL_
A building block in the plastics industry. Also widely used in the intermediates required for the production of synthetic detergents, lubricating oil additives, insecticides, bactericides and pharmaceuticals.

SODIUM PENTACHLOROPHENATE_
The water soluble salt of penta used to prevent microbiological attack on such organic substances as wood, adhesives, protein materials.

MALEIC ANHYDRIDE_
Principally used in the manufacture of synthetic resins, synthetic drying oils, and related products. Its highly reactive structure lends itself to the synthesis of complex organic chemicals by the Diels-Alder Process.

HYDROCHLORIC ACID_
Has wide application in the chemical industry for pickling and cleaning metals, processing textiles, refining ores and in the manufacture of chemicals generally.

ORTHOPHENYLPHENOL_
A very effective fungicide and bactericide used in many industrial applications for outstanding preservation.

PENTAERYTHRITOL_
Used primarily in the manufacture of alkyd resins. Imparts better film properties such as high gloss and gloss retention, good durability, faster drying. Used also in ester gums and synthetic drying aids.

Creative Chemistry . . . Your Partner in Progress

RCI

PHTHALIC ANHYDRIDE_
Used extensively in the manufacture of alkyd resins, plasticizers, organic pigments and dyestuffs, and pharmaceuticals, as well as other fine chemical intermediates.

SODIUM SULFITE_
Primarily used by the paper industry in the manufacture of kraft paper and fiber board by the semi-chemical hard wood process.

SULFURIC ACID_
A basic commodity used in the paper, dye and pigment, textile, fertilizer and organic chemical industries.

REICHHOLD
REICHHOLD CHEMICALS, INC., RCI BUILDING, WHITE PLAINS, N.Y.

Phthalocyanine blue, full strength, bbls., dlvd. E. of Rockies.
Resinated, bbls., same basis lb. 2.90 - —
Water dispersable, bbls., same basis lb. 2.75 - —
Pythalocyanine blue prices 1c. higher W. of Rockies.
Phthalocyanine green toner, bbls., works lb 3.35 - —
Resinated, bbls. lb 3.00 - —
Water dispersable, bbls. lb. 1.71 - —
Phthalocyanine green prices 1c. higher W. of Rockies.
Phthalylsulfacetamide, fib. dms., 1,000-lb. lots or more lb 5.00 - —
NF, fib. dms. lb. 5.20 - —
a-Picoline, dms., c.l., works, frt. equald lb. .43 - .43½
dms., l.c.l., works, frt. equald lb. .44 - —
tanks, same basis lb. .415 - —
b-Picoline, 98%, dms., t.l., works, lb 1.05 - —
dms., l.c.l., same basis lb. 1.15 - —
tanks, same basis lb. .95 - —
b,g-Picoline, 5°C, dms., c.l., works, lb. .32½- —
dms., l.c.l., works lb. .33 - —
g-Picoline, dms., t.o.b., works lb 1.60 - —
tanks, t.l., same basis lb 1.50 - —
Picric acid, NF, bbls. lb. .85 - —
Tech., bbls. lb. .44 - —
Pigment green B, kgs. lb. 1.50 - —
Pilocarpine hydrochloride, USP, bots oz. 5.25 - —
Pilocarpine nitrate, USP, bots., vials, oz. 5.15 - —
Pimento, Jamaican, bgs. lb. .68 - —
Mexican, bgs. lb. .57 - —
Pimento berry oil, NF, dms. lb. 3.75 - 9.25
Pimento leaf oil, crude, cns. lb. 2.20 - 2.60
Pine oil, dest.-dist., dms., l.c.l. works lb. .15 - —
dms., l.c.l. ex whse. New York. lb. .173 - —
Steam-dist., dms., ex whse., New York lb. .185 - —
dms., dlvd. lb. .188 - —
Pineneedle oil, Siberian (see Abies Siberoca oil).
Pinetar, retort, dms., c.l., works lb. .0611- —
dms., l.c.l., works lb. .0684- —
dms., c.l., ex whse., New York. tanks, works lb. .0795- —
Pinetar oil, coml., dms., c.l., works, lb. .0511- —
dms., l.c.l., works lb. .0611- —
dms., c.l., ex whse., New York. tanks, works lb. .0795- —
NF, rectified, dms., incl., l.c.l., works, South lb. .40 - —
dms., l.c.l., ex whse., New York lb. .41½- —
Pinetar oil, refd., dms., incl., l.c.l., works lb. .35 - —
dms., incl., l.c.l., ex whse, New York lb. .36½- —
Pink root, bls. lb. 1.75 - —
Piperazine, anhyd., dms., c.l., frt. alld lb 1.80 - —
dms., l.c.l., same basis lb. 1.85 - —
Piperazine citrate, 36%, dms., 1,000 lbs. or more, frt. alld lb. 1.15 - —
Piperazine dihydrochloride, 51%, dms., 1,000 lbs. or more, frt. alld lb. 1.23 - —
Piperazine hexahydrate, 44%, dms., 1,000 lbs or more, frt. alld lb. .86 - —
dms., 200-900 lbs., frt. alld lb. .89 - —
Piperazine phosphate, 42%, dms., 1,000 lbs. or more, frt. alld lb. 1.06 - —
Piperidine, dist., 98% min., dms., frt. equald lb. 2.60 - —
Piperonyl butoxide, dms., dlvd. E. lb. 4.50 - 5.05

PITCHES

Pitch quotations are listed individually For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Plaster of Paris (see Gypsum).
Platinum metal, works oz. 81.00 -85.00
Pleurisy root, bls. lb. .45 - .50
Podophyllum resin, NF, dms. lb. 12.50 - —
Poke root, bls. lb. .19 - .22
Polymyxin, octs., bulk., 50 billion units or more 1,000,000 units. .52 - —
bulk, bots., 25-50 billion units. 1,000,000 units. .54 - —
bulk, bots., 1-25 billion units. 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works lb. .42 - —
dms., 10,000-20,000-lb. lots, works. lb. .44 - —
dms., smaller lots, works lb. .47 - .49
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb. lots, works lb. .42 - —
dms., 10,000-20,000-lb. lots, works lb. .44 - —
dms., smaller lots, works lb. .47 - .49
Pontianak copal gum, chips, bgs lb. .25 - —
Nubs, bgs. lb. .37 - .40
Poppy seed, Argentine, bgs. lb. No stocks.
Dutch, bgs. lb. .22 - —
Danish, bgs. lb. .20½- —
Polish, bgs. lb. .20 - —
Turkish, bgs. lb. .17½- —
Potash, caustic, liq., 45% basis, dms., c.l., works 100 lbs. 4.25 - —
dms., l.c.l., same basis 100 lbs. 5.05 - —
tanks, same basis 100 lbs. 3.70 - —
reg., flake, 88-92%, dms., c.l., same basis 100 lbs. 9.15 - —
reg., flake, 88-92%, dms., l.c.l., same basis 100 lbs. 10.20 - —
solid, 88-92%, dms., c.l., works, 100 lbs. 8.70 - —
dms., l.c.l., works 100 lbs. 9.75 - —
Potassium acetate, NF, 200-lb. dm., f.o.b. works, E lb. .31 - —
Potassium bicarbonate, USP, gran. powd., dms lb. .22 - —
Potassium bichromate, gran., bgs., c.l., t.l., works lb. .18 - —
bgs., l.c.l., works lb. .18½- .19¾
Potassium bichromate in dms. ¾c. higher.
Potassium bitartrate, NF, gran., powd., 100-lb. bgs., c.l., frt. equald lb. .37 - —
100-lb. bgs., 5,000 lbs., 1 shipt., same basis lb. .38 - —
100-lb. bgs., smaller lots, same basis lb. .40 - —
Potassium borohydride, powd., dms., works lb. 16.00 -22.00
Pelletized potassium borohydride $1.25 per lb. higher in 1,000-lb. lots.
Potassium bromate, dms., 1,000-lb. lots or more, works lb. .50 - —
dms., smaller lots, works lb. .52 - .62
Potassium bromide, USP, gran., bbls., kgs lb. .39 - .40

Potassium carbonate, dom., NF, gran., bbls., dms lb. .20 - —
Dom., tech., powd., bbls., dms lb. .21 - .22
Dom., calcinated, bgs., c.l., works, 100 lbs. 8.50 - —
bgs., l.c.l., same basis 100 lbs. 9.55 - —
Dom., hydrated, 83-85%, bgs., c.l., works 100 lbs. 7.10 - —
bgs., l.c.l., works 100 lbs. 8.15 - —
Potassium chlorate, cryst., dms., c.l., works lb. .12½- —
dms., l.c.l., works lb. .13½- .14½
Powd., dms., c.l., works lb. .12¾- —
dms., l.c.l., works lb. .14 - .15
Potassium chlorate, NF, cryst., works lb. .12¼- —
dms., 2,000 lbs. or more, works lb. .16¾- —
NF, gran., 25-lb. metal dms lb. .36 - —
NF, powd., dms., 2,000 lbs. or more, works lb. .17¼- —
Potassium chloride, indust., 99.9% KCl, bulk, c.l., works ton. 27.00 - —
bgs., c.l., works ton. 31.50 - —
99.3% KCl, bulk, c.l., works ton. 26.00 - —
bgs., c.l., works ton. 30.50 - —
USP, cryst., dms. lb. .20 - .22
USP, gran., dms. lb. .21 - .23
USP, powd., dms. lb. .24 - .26
Potassium chloride agricultural (see Potassium muriate).
Potassium chromate, tech., dms., works lb. .50 - .51
Potassium citrate, NF, gran., 250-lb. dms., f.o.b. works E lb. .43 - —
powd., 250-lb dms., same basis, lb. .46 - —
Potassium cyanide, dms., 20,000-lb. lots or more, works lb. .42½- —
dms., 2,000-19,999-lb. lots, works, lb. .43 - —
dms., smaller lots, works lb. .44 - .44½
Potassium dichromate (see Potassium bichromate).
Potassium ferricyanide, dms., ton lots, works lb. .50 - —
dms., smaller lots, works lb. .65 - —
Potassium ferrocyanide, dms., ton lots lb. .24½- —
dms., smaller lots lb. .29 - —
Potassium fluoborate, fib. dms., c.l., works lb. .30 - —
fib dms., l.c.l., works lb. .31 - —
Potassium fluoride, dms., works lb. .37 - .38
Potassium gluconate, 100-lb dm., f.o.b. works E lb. 1.67 - —
Potassium guaiacol sulfonate, NF, dms lb 2.10 2.30
Potassium hydroxide, tech. (see Potash caustic).
Potassium hydroxide, USP, pellets, 100-lb. dms., 1 to 100-dm. lots lb. .33½- .38
Potassium hypophosphite, NF, fib. dms., 1,000-lb. lots lb. 1.38 - —
Potassium iodide, USP, cryst., gran., or powd., 250-lb. dm., f.o.b. works lb. 1.40 - —
Potassium manure salt, 22% K_2O, bulk, c.l., works unit-ton. .17 - .1765
Potassium metabisulfite, gran., dms., lb. .16 - —
Powd., dms. lb. .27 - —
Potassium muriate, standard, bulk, c.l., works unit-ton. .34½-.36½
bagged 60% minimum K_2O, same basis ton. 25.60 -26.80
Gran., bulk, c.l., works unit-ton. .35 - .37
bagged, 60% minimum K_2O, same basis ton. 25.90 -27.10
Inside prices apply to material contracted for prior to July 1, 1959.
Outside prices apply to material contracted for after that date but also for delivery during the current month.
Potassium nitrate, NF, cryst., bbls., 20-ton lots 100 lbs 17.00 - —
bbls., smaller lots 100 lbs. 18.00 -19.00
gran., bgs., 20-ton lots 100 lbs. 9.50 - —
bgs., smaller lots 100 lbs. 11.00 -12.00
powd., bgs., 20-ton lots 100 lbs. 10.50 - —
bgs., smaller lots 100 lbs. 12.00 -13.00
Potassium oxalate, neutral, tech., fine gran., powd., 300-lb. dm., f.o.b. works E lb. .32 - —
Potassium pentaborate, gran., dms., c.l., works ton. 219.50 - —
dms., ton lots, ex whse ton. 211.00 - —
dms., smaller lots, ex whse ton. 316.00 - —
Powdered potassium pentaborate $10 per ton higher.
Potassium perchlorate, dms., c.l., works lb. .18½- —
dms., l.c.l., works lb. .19 - .20
Potassium permanganate, coml., kgs., works lb. .25 - .33
USP, dms., works lb. .29 - .35
Potassium persulfate, dms., c.l., works lb. .17½- —
dms., l.c.l., works lb. .18 - .21
Potassium pyrophosphate, tetrabasic, dms., works lb. .15½- .18½
Potassium prussiate red (see Potassium ferrocyanide).
Potassium prussiate yellow (see Potassium ferro-cyanide).
Potassium silicate, electrical grade, 30° Be, 1:2.0, dms., c.l., works 100 lbs. 6.50 - —
dms., l.c.l., 5 dm. lots or more, works 100 lbs. 7.25 - 7.65
tanks, works 100 lbs. 6.15 - —
Potassium silicate, electrical grade, 40.5° Be, 1:2.1, dms., c.l., works 100 lbs. 5.95 - —
dms., l.c.l., 5 dm. lots or more, works 100 lbs. 6.70 - —
tanks, works 100 lbs. 5.60 - —
Glass grade, bgs., c.l., works, bgs., l.c.l., works 100 lbs. 17.30 -18.00
Soln., 29° Be, 1:2.5, dms., c.l., works 100 lbs. 4.95 - —
dms., l.c.l., 5-dm. lots or more, works 100 lbs. 5.70 - —
tanks, works 100 lbs. 4.60 - —
Potassium silicofluoride, bgs., works, lb. .09½- .10
Potassium silicofluoride in drums, 0.4c. per lb. higher.
Potassium stannate, dms., frt. alld, E lb. .780 - .853
Potassium sulfate, agricultural, bulk, c.l., works unit-ton. .67½- .69½
Inside price applies to tonnage contracted for prior to July 1, 1959.
Outside price applies to tonnage contracted for after that date but also for delivery during the current month.
Potassium sulfate, NF VII, cryst., dms., lb. .31 - .33
NF VII, gran., dms lb. .18½- —
NF VII, powd., dms lb. .16 - .17
Potassium sulfocyanate, NF, cryst., (see Potassium thiocyanate).
Potassium thiocyanate, NF, cryst., dms., works lb. .96 - .98
Tech., dms., works lb. .77 - .79

Potassium titanate, ctns., c.l., works, ctns., 5-ton lots, works lb. .16¼- —
ctns., 1-ton lots or less, works lb. .16½- —
Potassium-magnesium sulfate, basis 40% K_2SO_4 and 18% MgO, bulk, works, base price. bulk, works, July forward ton. 13.45 - —
Potassium-sodium tartrate, NF, gran, or powd., 250-lb. dms., c.l., works E lb. .42½- —
250-lb. dms., 5,000-lb. lots, same basis lb. .43 - —
250-lb. dms., same basis lb. .43½- —
Potassium-titanium fluoride, fib. dms., works lb. .39 - .40
Potassium-zirconium flouride, fib. dms., c.l., works lb. .50 - —
fib. dms., l.c.l., works lb. .52½- .55
Pregnenolone, bots. gram. No prices.
Pregnenolone acetate, bots. gram. No prices.
Procaine hydrochloride, USP, antibiotic grade, dms., 2,000-lb. lots, frt. alld lb. 2.25 - —
USP, ampule grade, dms., 1,000 dms., 500 lbs lbs lb 2.40 - —
dms., 100 lbs lb 2.45 - —
lb. 2.50 - —
Progesterone, USP, bots gram. No prices.
Pregnenolone acetate, bots gram. No prices.
Propenyl guaethol, dms. lb. 24.30 -27.00
b-Propriolactone, dms., c.l., t.l., f.o.b. works lb. .89 - —
dms., l.c.l., t.l.l., same basis lb. .90 - —
tanks, same basis lb. .87 - —
Propionic acid, syn., pure, dms., c.l., works lb. .23¼- —
dms., l.c.l., works lb. .24¾- —
tanks, works lb. .20¾- —
n-Propyl acetate, dms., c.l., dlvd. lb. .14¾- —
dms., l.c.l., dlvd lb. .16¼- —
tanks, dlvd. lb. .12¼- —
n-Propyl alcohol, dms., c.l., dlvd lb. .14 - .15
dms., l.c.l., dlvd lb. .15½- .16½
tanks, dlvd. lb. .11½- .12½
n-Propyl gallate, dms., 100 to 2,000-lb. lots, works lb. 3.90 - 4.40
n-Propyl-p-hydroxbenzoate, USP, dms lb. 2.30 - 2.40
Propyl thiouracil, bots., 50 kilo lots or more kilo. 55.00 - —
bots., smaller lots kilo. 55.10 -55.30
n-Propylamine, dms., c.l., dlvd lb. 1.24 - —
dms., l.c.l., same basis lb. 1.235 - —
n-Propylene dichloride, consumers', dms., c.l., dlvd. E lb. .0845- —
dms., l.c.l., same basis lb. .0995- —
tanks, same basis lb. .07 - —
Propylene dichloride prices in West 1c. higher, same basis
Propylene glycol, indust., dms., c.l., dlvd. E lb. .15 - —
dms., l.c.l., same basis lb. .16¾- —
tanks, same basis lb. .12½- —
USP, dms., c.l., dlvd. E lb. .17 - —
dms., l.c.l., same basis lb. .18¾- —
tanks, same basis lb. .14½- —
Propylene glycol methyl ether, dms., c.l., dlvd lb. .20 - —
dms., l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½- —
Propylene oxide, dms., c.l., dlvd. E, lb. .17 - —
dms., l.c.l., dlvd. E lb. .18½- —
tanks, dlvd. E lb. .14½- —
Psyllium seed, black, bgs lb. .30 - .35
Blonde, bgs. lb. .18 - .20
Husks, bgs. lb. .42 - .45
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03⅝- .04¼
bgs., smalder lots lb. .03⅞- —
Imp., Italian, silk-screen, coarse, bgs, ton lots lb. .06½- —
fine, bgs., ton lots lb. .04 - —
sun dried, coarse, bgs ton. 60.00 - —
fine, bgs. ton. 60.00 -70.00
Pumpkin seed, bgs lb. .25 - .26
Pyrethrins, syn. (see Allethrin).
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bgs., ton, works lb. .50 - —
Powd., 1.3% pyrethrins, bgs., ton, works lb. .71 - —
Pyrethrum liquid, 20:1 basis (2 grams pyrethrins per 100cc odorless base), dms., works, gal. 9.60 - 9.80
Pyrethrum liquid, 100:1 basis (10 grams pyrethrine per 100cc odorless base), dms., works gal. 45.90 -46.90
Pyrethrum oleoresin, dewaxed, 20%, dms., works lb. 11.00 -11.35
purif, 20%, dms., works lb. 11.00 -11.35
Pyridine, denat., dms., c.l., works and frt. equald gal. 2.55 - —
dms., l.c.l., same basis gal. 2.70 - —
Reid., 2°, non-ret. dms., l.c.l., same basis lb. .70 - —
tanks, same basis lb. .65 - —
Pyridoxine hydrochloride, USP, 500-gram bots., dms., f.o.b. works kilo. 175.00 - —
Pyrites, Canadian, 48-50% S, mines, long-ton. 5.00 - 6.00
Pyrocatechol (see Catechol).
Pyrogallic acid, NF (see Pyrogallol).
Pyrogallic acid, tech., bbls., 100-lbs., f.o.b., works lb. 3.50 - —
Pyrogallol, NF, 100-lb. dms lb. 3.50 - —
Pyroxylin, USP, bots lb. 9.50 - —

Q

Quassia chips lb. .10 - —
Quicksilver (see Mercury metal).
Quince seed, bgs lb. 1.30 - 1.40
Quinidine sulfate, USP, 1,000-oz. dm oz. .74½- —
Quinine, NF, 1,000-oz. dm oz. .3105- —
Quinine bisulfate, USP, 1,000-oz. dm. oz. .2330- —
Quinine hydrochloride, 1,000-oz. dm. oz. .3030- —
Quinine sulfate, USP, 1,000-oz. dm. oz. .2575- —
Quinoline, dms., c.l., frt. equald lb. .50¾- —
dms., l.c.l., same basis lb. .51¼- —
tanks, same basis lb. .50 - —

R

R salt paste, dms., frt. alld., 100% basis lb. .98 - —
Powd., frt. alld. 100% basis lb. 1.08 - —
Rapeseed oil, dms lb. .15 - .15¼
tanks lb. .13 - —
Rare earth oxalate, NF, 45-50%, bgs, works lb. 1.15 - —
Rauwolfia serpentina root, powd., bbls., dms lb. 1.00 - 1.20
Red carmine, No. 40 (see Carmine).
Red oil (see Oleic acid).

RED PIGMENTS

Red pigment quotations are listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner.

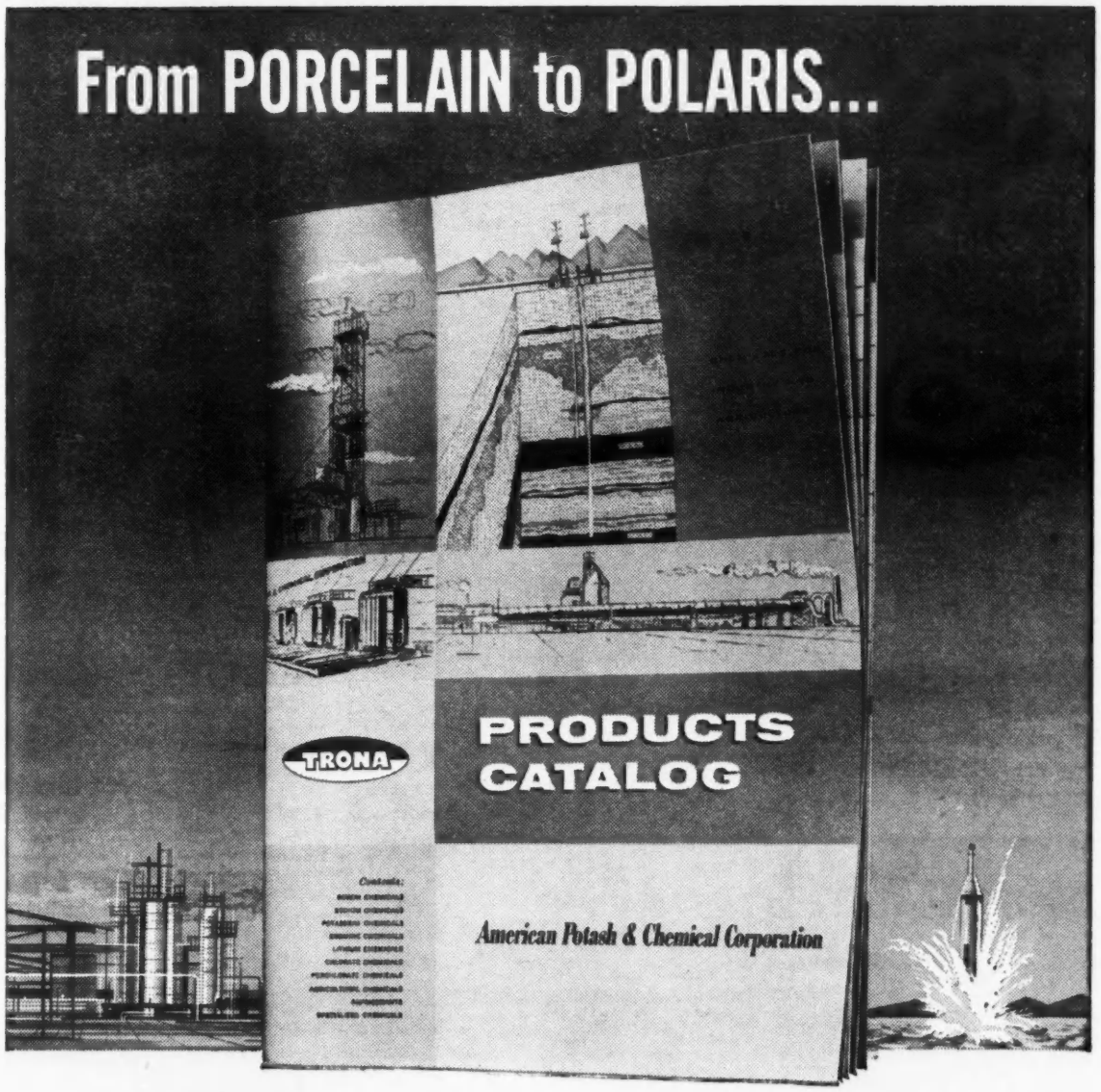
Red precipitate (see Mercuric oxide, red).
Red toner, Lake C, alizanine, bbls., works lb. 1.25 - —
Reserpine, cryst., bots gram. 1.25 - —

Resorcinol, tech grade, dms., c.l., works, frt. equald lb. .77¼- —
dms., l.c.l., same basis lb. .78½- —
USP, powd., dms., works lb. 2.95 - —
Resorcinol monoacetate, NF, dms. lb. 2.50 - —
Rhatany root, bgs. lb. .14 - .16
Rhodamine red toner, molybdated, PMA, kgs., works lb. 6.00 - —
Tungstated, PTMA, works, kgs lb. 6.60 - —
Rhodinol, 5-lb. cans lb. 42.00 -51.00
Synthetic lb. 14.00 -16.00
Rhubarb root, India, whole, bgs lb. .25 - —
powd., bgs. lb. .35 - —
Riboflavin, USP, fib. dms., kilo or more, dlvd kilo. 36.00 - —
Riboflavin, USP, readily soluble, lots, dlvd kilo. 13.00 - —
Riboflavin, 5-phosphate-sodium, fib. dms., kilo or more, dlvd. kilo. 104.50 - —
Rice bran oil, clarified, dms., l.c.l. tanks, dlvd. E lb. .14½- .15
lb. .12½- —
Ricinoleic acid (see Castor oil acids split).
Rochelle salt (see Potassium-sodium tartrate)
Roofing pitch (see Coaltar pitch roofing).
Rose oil, nat., Bulgarian, bots oz. 72.00 - —
Turkish, bots. oz. 55.00 -58.00
Rosemary oil, Spanish, NF, cns., dms lb. .97 - 1.40
Spanish, tech., cns., dms lb. .50 - 1.20
Rosin gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib. dms., works unit-lb. .12 - —
Resin, 25-45%, fib. dms., works, unit-lb. .12 - —
Rottenstone, bgs., 5-ton lots, exwhse lb. .03¾- —
bgs., ton lots, same basis lb. .04¼- —
Rubber solvent, petroleum, 115°F-245°F b.r., tankcars, New Jersey and New York gal. .19 - —
Group 3 gal. .13875- —
Houston, Texas gal. .155 - —
Rue oil, bots lb. 2.75 - 3.00
Rutin, NF, fib. dms., 10 kilo lots, kilo. 13.00 - —
fib. dms., 5 kilo lots kilo. 13.50 - —
fib. dms., 1 kilo kilo. 14.00 - —
Ryania, 100%, powd., bgs., c.l., works lb. .22 - —
bgs., l.c.l., same basis lb. .24 - —

S

S acid, bbls., works lb. 3.25 - —
Sabadilla seed, activated, ground with lime, bbls lb. .42 - .44
Saccharin, calcium, fib. dms., 1,000-lb. lots, works lb. 2.50 - —
USP, gran., soluble, dms., 1,000-lb. lots lb. 1.40 - —
dms., smaller lots lb. 1.50 - —
USP, powd., soluble, insolub'e, dms., 1,000-lb. lots lb. 1.45 - —
dms., smaller lots lb. 1.55 - —
USP, powd., insoluble, dms., 1,000-lb. lots lb. 1.43 - —
dms., smaller lots lb. 1.53 - —
Safflower oil, dms., New York lb. .1755- .18
tanks, Atl. Coast lb. .1555- —
Saffron, Mancha Superior, tins lb. 19.50 - —
Safrol, dms. lb. .70 - —
Sage, Dalmatian, bgs lb. .40 - —
Greek, cns. lb. .16 - —
Italian, cns. lb. .18 - —
Sage oil, clary, bots lb. 16.65 -18.00
Dalmatian, cns. lb. 2.85 - 3.25
Spanish, cns. lb. 1.25 - 1.75
Sal soda (see Soda sal).
Salicylaldehyde, dms., c.l., t.l., f.o.b., plant, frt. equald lb. 1.23 - —
dms., l.c.l., same basis lb. 1.25 - —
Salicylamide, 100-lb. dms lb. 1.05 - —
Salicylic acid, crude, fib. dms., c.l., t.l., frt. alld. lb. .37¼- —
fib. dms., l.c.l., frt. alld. on 100 lbs. or more lb. .38½- —
Sublimed, tech., fib. dms., c.l., t.l., dlvd lb. .39¼- —
fib. dms., l.c.l., dlvd lb. .43½- —
Salicylic acid, sublimed, USP, cryst., 200-lb. fib. dms., 1,000 lbs. or more lb. .50½- —
200-lb. fib. dms., less than 1,000 lbs lb. .53½- —
100-lb. fib. dms., 1,000 lbs. or more lb. .52½- —
100-lb. fib. dms., less than 1,000 lbs. lb. .55½- —
USP, powd., 100-lb. fib. dms., 1,000 lbs. or more lb. .57½- —
100-lb. fib. dms., less than 1,000 lbs lb. .60½- —
Salol, NF, gran., bbls., kgs lb. 1.20 - —
Powdered salol, 25c. per lb. higher.
Salt, rock, paper bgs., c.l. 100 lbs. 1.09 - —
Salt, table vacuum, common, fine, paper bgs., c.l. 100 lbs. 1.34 - —
Saltcake, dom., bulk, works, 100% Na_2SO_4 basis ton. 28.00 - —
Saltpeter (see Potassium nitrate).
Sandalwood, E. Indian, chips, bgs., powd., fib. dms lb. .55 - .66
Sandalwood oil, cns. lb. .75 - .76
Sarcosine, tech., tanks, f.o.b., works, frt. equald lb. 19.00 - —
Sardine oil, crude, tanks, Pac. coast. lb. No stocks.
Sassafras oil, artif., dms lb. .43 - —
Nat., dom., dms lb. 1.45 - 2.15
Savory oil, cns lb. 4.75 - —
Schaeffer's salt, paste, dms., frt. alld, 100% basis lb. .85 - —
Powd., bgs., frt. alld., 100% basis, lb. .95 - —
Scopolamine hydrobromide, USP, bots oz. 13.00 - —
Sebacic acid, CP, bgs., c.l., works, bgs., l.c.l., works lb. .69½- —
Purified, bgs., c.l., works lb. .71½- —
bgs., l.c.l., works lb. .65½- —
Seidlitz mixture, fib. dms., 5,000-lb. lots lb. .30½- —
fib. dms., smaller lots lb. .31 - .32
Selenium, powd., 99½%, dms., dlvd. lb. 7.00 - —
Senega root, bls lb. 3.00 - —
Senna leaves, Alexandria, whole and half, bls lb. .20 - .22
siftings lb. .16 - —
Tinnevelly, No. 1, bls lb. .22 - —
No. 2, bls lb. .18 - —
No. 3, bls lb. .14 - —
pods, bls. lb. .28 - —
powd., bbls., bxs lb. .17 - —
Serpentaria root, bls lb. 6.50 - —
Sesame oil, USP, dms lb. .38 - .39
Sesame seed, Colombian, bgs lb. .15½- —
Lebanese, hulled, bgs lb. .19 - —
Nicaraguan, hulled, bgs lb. .21½- —
nat., bgs. lb. .14 - —
Salvadorian, Nat., bgs lb. .16 - —
Shellac, bleached, bonedry, bgs., 1,500-lb. lots lb. .46 - —
bbls., 1,500-lb. lots lb. .47 - —
kgs., 1,500-lb. lots lb. .48 - —
Bonedry shellacs prices for less than 1,500-lb. lots 1c. per lb. higher for all packages.
Shellac, bleached, refd., bgs., 1,500-lb. lots lb. .56 - —
bbls., 1,500-lb. lots lb. .57 - —
kgs., 1,500-lb. lots lb. .58 - —

Shellac, orange, lemon No. 1, bgs., 10-bg. lots lb. .37 - .39
lemon No. 2, bgs., 10-bg. lots. lb. .34 - .37
superfine, bgs., 10-bg. lots lb. .32 - .34
Shellac in 1 to 10-bg. lots 1c. per lb. more.
Shingle stain oil, tar distillate, dms., c.l., works gal. .37 - —
dms., l.c.l., works gal. .48 - —
tanks, works gal. .25 - —
Sienna pigment, burnt, paper bgs., c.l., works lb. .06½- .18½
paper bgs., l.c.l., works lb. .06¾- .17¾
Raw, paper bgs., c.l., works lb. .06¾- .16¾
paper bgs., l.c.l., works lb. .07 - .17
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works ton.25.00 - —
bgs., l.c.l., works, ex whse. ton.45.00 -55.00
Silica, hard-quartz, 99½%, 325 mesh, bgs., c.l., works ton.20.00 - —
bgs., l.c.l., works ton.25.00 - —
99½%, 140 mesh, bgs., c.l., works ton.15.00 - —
bgs., l.c.l., works ton.20.00 - —
Silicon tetrachloride, tech., dms., c.l., works lb. .18 - —
dms., l.c.l., works lb. .22 - .30½
tanks, works lb. .17 - —
Silver bullion, ingots, cs Troy oz. .91⅜- —
Silver cyanide, bots., 1,000-oz. lots, oz. .94¾- —
bots., 500-oz. lots oz. .95¼- —
bots., 100-oz. lots oz. .96¼- —
Silver nitrate, CP, cryst., bots., 1,000 to 3,000-oz., f.o.b. works oz. .67¼- —
bots., 250-500 oz., same basis. oz. 67¾- —
USP granular silver nitrate 4c. per oz. higher.
Silver proteinate, mild, USP, bots., dms., 1,000-oz. lots oz. 1.15 - —
Strong, NF, bots., dms., 1,000-oz. lots oz. 1.10 - —
Snakeroot oil, Canada, cns lb.40.00 -43.00
Soapbark, crushed, bls lb. .30 - .35
Powd., bls. lb. .35 - .40
Whole, bls. lb. .20 - .25
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs. 1.90 - —
paper bgs., l.c.l., stock pts., 100 lbs. 3.00 - 4.77
bulk, c.l., works 100 lbs. 1.60 - —
Light, 58%, paper bgs., c.l., works 100 lbs. 1.85 - —
paper bgs., l.c.l., stock pts. 100 lbs. 3.95 - 4.72
bulk, c.l., works 100 lbs. 1.55 - —
Soda, caustic, flake, 76%, dms., c.l., works, frt. equald 100 lbs. 5.20 - —
liq., 50%, sellers' tanks, works, dry basis 100 lbs. 2.90 - —
50%, rayon type, sellers' tanks, works, dry basis 100 lbs. 2.90 - 3.00
Soda, caustic, flake, 73%, sellers' tanks, works, dry basis. 100 lbs. 3.00 - —
liq., 73%, rayon type, sellers' tanks, works, dry basis lb. 3.00 - 3.10
solid, 76%, dms., c.l., works, 100 lbs. 4.80 - —
Soda, sal, conc., bgs., c.l., works. 100 lbs. 2.50 - —
bgs., smaller lots, works 100 lbs. 2.80 - —
Sodium acetate, anhyd., bgs., c.l., dlvd. E lb. .14½- —
NF, 60%, gran., dms., c.l., works, lb. .15½- —
dms., l.c.l., works lb. .17½- —
Sodium alginate, NF, white powd., dom., 300 lbs. or more lb. 1.02 - —
Sodium p-aminosalicylate, dms., 100-lb. lots or more, frt. adjusted lb. 1.90 - —
Sodium antimoniate, bgs., c.l., dlvd. E lb. .27½- —
bgs., l.c.l., dlvd. E lb. .29 - —
Sodium arsenate, 60% arsenic pentoxide, dms., any quantity,
Sodium arsenite, 90% pink powder, 75% arsenious oxide, leaders, dms., ton lots or more, works lb. .17½- —
dms., less than ton lots, works lb. .18 - .19
Sodium ascorbate, dms., 25-50 kilo dms., f.o.b. works kilo.10.00 - —
10-kilo dm., same basis kilo.10.35 - —
5-kilo dm., same basis kilo.10.75 - —
1-kilo bot., same basis kilo.11.00 - —
Sodium benzoate, tech., dms., c.l., t.l., frt. alld lb. .35 - —
dms., l.c.l., same basis lb. .39 - —
USP, dms., c.l., t.l., frt. alld lb. .38 - —
dms., ton lots, same basis lb. .43 - —
dms., 1,000-lb. lots, same basis. lb. .45 - —
Sodium bicarbonate, USP, gran., bgs., c.l., works 100 lbs. 2.95 - —
bgs., l.c.l., works 100 lbs. 3.85 - —
USP, powd., bgs., c.l., works, 100 lbs. 2.55 - —
bgs., l.c.l., works 100 lbs. 3.45 - —
Sodium bichromate, gran., bgs., c.l., t.l., works lb. .13 - —
bgs., l.c.l., works lb. .13½- .14¾
Sodium bichromate in dms. ⅜c. per lb. higher.
Sodium bifluoride, bbls., c.l., works, frt. equald lb. .19½- —
bbls., l.c.l., same basis lb. .2025- —
Sodium bisulfate, bulk, c.l., works, 100 lbs. 2.00 - —
dms., c.l., frt. equald 100 lbs. 3.00 - 3.60
dms., l.c.l., frt. equald 100 lbs. 3.50 - 4.10
Sodium bisulfite, anhyd., bgs., c.l., works 100 lbs. 5.00 - —
bgs., l.c.l., works 100 lbs. 5.45 - —
Soln., 35°, bbls., c.l., works 100 lbs. 1.70 - —
bbls., l.c.l., works 100 lbs. 2.20 - —
Sodium borate (see Borax).
Sodium borohydride, powd., dms., c.l., works lb.19.90 - —
dms., l.c.l., works lb.33.00 -40.00
Sodium borohydride, stabilized water soln., 12% NaBH, 100% basis, dms., works lb.15.00 - —
Pelletized sodium borohydride $1 per lb. higher in 1,000-lb. lots.
Sodium bromide, USP, gran., dms., works lb. .40 - —
Sodium carbonate, cryst., monohydrated (see Soda, sal).
Sodium carbonate, monohydrated, bgs., c.l., works 100 lbs. 3.10 - —
bgs., l.c.l., works 100 lbs. 3.50 - —
Sodium carboxymethyl cellulose (see CMC).
Sodium chlorate, cryst., 350-lb. dms., c.l., works lb. .09 - —
dms., l.c.l., works lb. .09½- .10½
Sodium chlorate in 100-lb. dms., only, ¼c. per lb. higher.
Sodium chloride, tech. (see Salt).
Sodium chloride, USP, gran., bgs. lb. .03 - —
Sodium chlorite, tech., dms., c.l., works lb. .53 - —
dms., 20-dm. lots or more, works. lb. .66 - —
dms., smaller lots, works lb. .70 - .73
Sodium chloroacetate, tech., dms., c.l., works lb. .27 - —
dms., l.c.l., works lb. .28 - —
Sodium chromate, anhyd., fib. dms., c.l., t.l., works lb. .14¾- —
fib. dms., l.c.l., works lb. .15¼- .16½
Sodium chromate tetrahydrate, bgs., c.l., t.l., works lb. .1015- —
bgs., l.c.l. lb. .1065- .1190
Sodium citrate, anhyd., 200-lb. dm., f.o.b. works E lb. .62 - —
NF VIII, gran, bgs., c.l., same basis lb. .26 - —
USP XIV, gran., bgs., c.l., same basis lb. .29 - —
Sodium citrate, USP, powd. prices ½c. higher.
Sodium cyanate, dms., 1,000-lb. lots, works lb. .85 - —
dms., smaller lots, works lb. .90 - 1.10
Sodium cyanide, briquettes or gran., 97 percent min., dms., works, 20,000-lb. lots lb. .176 - —
dms., same basis, 5,000 to 19,999-lb. lots lb. .188 - —
dms., same basis, 1,000 to 4,900-lb. lots lb. .198 - —
Sodium cyclamate, 100-lb. dm., f.o.b. works lb. 1.93 - —
Sodium diacetate, anhyd., 39-41% acetic acid, dms., c.l., works lb. .18 - —
250-lb. dms., l.c.l., works lb. .18¼- —
Tech., 33-35% acetic acid, dms., l.c.l., works lb. .15 - —
250-lb. dms., l.c.l., works lb. .15¾- —
Sodium dimethyl dithiocarbamate, 40% soln., dms., c.l., t.l., frt. alld., 100% basis lb. .42 - —
dms., l.c.l., l.t.l., same basis lb. .47 - .52
tanks, same basis lb. .38 - —
Sodium ferrocyanide, bgs., 10-ton lots lb. .13½- —
bgs., smaller lots lb. .14¼- —
Sodium fluoride, white, 97%, fib. dms., c.l., works, frt. equald lb. .1390- —
fib. dms., l.c.l., works, frt. equald lb. .1465- —
Sodium formate, bgs., c.l., works. 100 lbs. 7.05 - —
bgs., l.c.l., ex whse 100 lbs. 8.65 - —
Sodium gentisate, 100-lb. fib. dms. lb. 5.50 - —
Sodium gluconate, refd., 250-lb. dm., f.o.b. works E lb. .64 - —
Tech., bgs., c.l., t.l., same basis lb. .34 - —
Sodium hydride, 50% soln. in oil, dms., works lb. 1.25 - 2.50
25% soln. in oil, dms., 50 lbs. or less, f.o.b. shipping point. lb. 2.20 - —
dms., 50-99 lbs., same basis lb. 1.77 - —
dms., 100-999 lbs., same basis lb. 1.20 - —
dms., 1,000 lbs. or more, same basis lb. .95 - —
Sodium hydrosulfide (see Sodium sulfhydrate).
Sodium hydrosulfite, dms, c.l., frt. alld lb. 23½- —
dms., l.c.l., frt. alld. lb. .25¾- —
Sodium hydroxide, NF, pellets, 100-lb. dms., 1 to 100-dm. lots. lb. .23½- .28
Sodium hydroxide, tech. (see Soda, caustic).
Sodium hypophosphite, NF, dms., 1,000-lb. lots lb. .97 - —
Sodium hyposulfite (see Sodium thiosulfate).
Sodium iodide, USP, 300-lb. dms., f.o.b. works lb. 1.98 - —
Sodium lauryl sulfate, dms., c.l., dlvd lb. .20½- —
dms., l.t.l., dlvd. lb. .21½- —
tanks, dlvd. lb. .19½- —
Sodium lignin sulfonate, bgs., c.l., works 100 lbs. 4.25 - 6.50
l.c.l., bgs., works 100 lbs. 4.40 - 7.00
Sodium metabisulfite (see Sodium bisulfite).
Sodium metaborate octahydrate, gran., bgs., c.l., works ton.210.00 - —
bgs., ton lots, ex whse 100 lbs. 8.00 - —
bgs., smaller lots, ex whse. 100 lbs. 9.25 -11.25
Tetrahydrate, bgs., c.l., works. ton.210.00 - —
bgs., ton lots, ex whse 100 lbs.13.93 - —
bgs., smaller lots, ex whse. 100 lbs.15.18 -17.18
Sodium, metallic, bricks, c.l., works. lb. .21 - —
Fused, 18,000-lb. lots or more, works lb. .19½- —
tanks, works lb. .17 - —
Sodium metalinate, bbls., frt. alld. lb. .62 - —
Sodium metaphosphate, bgs., c.l., f.o.b. shipping pt 100 lbs.11.10 - —
bgs., l.c.l., same basis 100 lbs.11.85 - —
dms., c.l., same basis 100 lbs.11.70 - —
dms., l.c.l., same basis 100 lbs.12.45 - —
Sodium metasilicate, anhyd., bgs., c.l., works 100 lbs. 5.70 - —
bgs., 6,000-19,900 lb. lots, works. 100 lbs. 6.05 - —
dms., c.l., works 100 lbs. 6.20 - —
dms., l.c.l., works 100 lbs. 6.55 - —
Sodium metasilicate pentahydrate, bgs., c.l., works 100 lbs. 4.45 - —
bgs., l.c.l., works 100 lbs. 4.80 - 6.75
dms., l.c.l., works 100 lbs. 4.95 - —
dms., l.c.l., works 100 lbs. 5.30 - 7.25
Sodium molybdate, anhyd., dms., works, frt. equald lb. .92 - .99
Cryst., dms., works, frt. alld lb. .74 - .76



...more than 200 chemicals for common and uncommon uses

What's your problem? Are you in enamelware or glass, needing the dependable qualities of uniformly high grade boron chemicals for glaze or batch?...or a rocket scientist evaluating ammonium perchlorate as an oxidizer in solid propellant fuel? The new TRONA® catalog lists the descriptions, properties, and applications of these and more than two hundred other products of American Potash and Chemical Corporation for today's expanding markets. Of special interest—our line of Lindsay rare earth, thorium and yttrium chemicals, for which TRONA is a primary source. *Send for your catalog today, or contact your nearest AP&CC sales representative.*

Including:
BORON CHEMICALS
Borax, V-Bor®, Tronabor®, Pyrobor®, Boric Acid, Sodium Pentaborate, Boro-Spray®, Elemental Boron, Boric Acid Anhydrous
LITHIUM CHEMICALS
Lithium Carbonate, Bikalith®, Ores, Lithium Hydroxide, Lithium Chloride, Lithium Brines, Lithium Metal
ELECTROCHEMICALS
Sodium Chlorate, Ammonium Perchlorate, Potassium Chlorate, Potassium Perchlorate, Manganese Dioxide
plus LINDSAY RARE EARTH, THORIUM and YTTRIUM CHEMICALS

TRONA **American Potash & Chemical Corporation**
3000 WEST SIXTH ST., DEPT. 6, LOS ANGELES 54, CALIF.

Sales offices:
3000 W. Sixth St., **Los Angeles** 54, Calif. • 99 Park Ave., **New York** 16, N.Y. • 235 Montgomery St., **San Francisco**, Calif. • 1320 S. W. Broadway, **Portland**, Ore. 214 Walton Bldg., **Atlanta**, Ga. • 3557 W. Peterson Avenue, **Chicago**, Ill. • 1600 Fairfield Avenue, **Shreveport**, La. • 2025 Riverside Drive, **Columbus** 21, Ohio

Sodium monoglutamate (see Monosodium glutamate).
Sodium monohydrate (see Sodium carbonate, monohydrated).
Sodium naphthionate, bbls. lb. .70 - —
Sodium nitrate, dom., crude, bulk, c.l., works ton.48.00 - —
bulk, c.l., works ton.44.00 - —
Imp., crude, 100-lb. bgs., c.l., Atl., Gulf, Pac., whse ton.48.00 - —
bulk, c.l., same basis ton.44.00 - —
Sodium nitrite, USP, bbls., c.l., works, frt. equald 100 lbs 9.00 - —
bbls., l.c.l., same basis 100 lbs.11.00 - —
Sodium orthosilicate, conc., cms., c.l., works 100 lbs. 6.70 - —
dms., l.c.l., works 100 lbs. 7.05 - 7.65
Hydrated, flake, bbls., c.l., works. 100 lbs. 5.65 - —
bbls., l.c.l., works 100 lbs. 7.00 - 7.90
Sodium oxalate, 83%, bgs., works, 100 lbs.12.35 - —
99%, bags, works 100 lbs.15.40 - —
Sodium para-aminobenzoate (see Sodium p-aminobenzoate).
Sodium para-aminosalicylate (see Sodium p-aminosalicylate).
Sodium pentachlorophenate, briquets, cms., c.l., works, frt. equald lb. .26 - —
dms., l.c.l., same basis lb. .27½ - .34
Pellets, dms., c.l., same basis lb. .26 - —
dms., c.l., same basis lb. .27½ - .34
Powd., dms., c.l., same basis lb. .25 - —
dms., l.c.l., same basis lb. .26½ - .33
Sodium pentabarbital, USP, dms., 100 lbs. or more lb. 6.00 - —
Sodium perborate, NF, tech., bgs., c.l., works lb. .18½ - —
bgs., l.c.l., works lb. .19 - .21
Sodium peroxide, dms., c.l., t.l., dlvd. E. of Miss lb. .21½ - —
dms., l.c.l., same basis lb. .22 - .22½
Sodium phenobarbital, USP, 100-lb. dms lb. 3.75 - —
Sodium phenolsulfonate, USP, IX, gran., dms lb. .52 - .53
NF, powd., dms. lb. .55 - .56
Sodium phosphate, dibasic, anhyd., bgs., c.l., frt. equald 100 lbs. 7.95 - —
bgs., l.c.l., same basis 100 lbs. 8.35 - 9.40
Dibasic, cryst., bgs., c.l., t.l., frt. equald 100 lbs. 4.60 - —
bgs., l.c.l., frt. equald 100 lbs. 5.00 - 5.75
Dibasic, duohydrate, bgs., c.l., frt. equald 100 lbs. 7.60 - —
bgs., l.c.l., same basis 100 lbs. 8.10 - —
USP, dried, powd., bgs., cms., works lb. .19 - .20½
Monobasic, anhyd., bgs., c.l., frt. equald 100 lbs. 9.00 - —
bgs., l.c.l., same basis 100 lbs. 9.40 - 10.00
Tribasic, anhyd., bgs., c.l., frt. equald 100 lbs. 9.00 - —
bgs., l.c.l., frt. equald 100 lbs. 9.45 - 10.05
Sodium phosphate in dms. 60c. to 80c. higher than bgs.
Sodium picramate, tech., paste, dms., f.o.b. works, frt. equald lb. .90 - —
Sodium propionate, any quantity, dms., dlvd. E. of Rockies, lb. .34½ - —
Prices W. of Rockies 3c. per lb. more.
Sodium prussiate, yellow (see Sodium ferrocyanide).
Sodium pyrophosphate, acid, bgs., c.l., works, frt. equald 100 lbs.11.10 - —
bgs., l.c.l., same basis 100 lbs.11.85 - 12.35
Sodium pyrophosphate, ferric, dms., c.l., t.l., works lb. .36 - —
dms., l.c.l., works lb. .37 - .39
Tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.81 - —
bgs., l.c.l. same basis 100 lbs. 9.21 - 9.71
Sodium salicylate, USP, dms., 1,000-lbs. or more lb. .78½ - —
dms., less than 1,000 lbs., dms.lb. .81½ - —
Sodium sesquicarbonate, bgs., c.l., works 100 lbs. 2.35 - —
bgs., l.c.l., dlvd. zone 1 100 lbs. 4.10 - 4.35
dlvd. zone 2 100 lbs. 4.35 - 4.60
dlvd. zone 3 100 lbs. 4.75 - 4.90
dlvd. zone 4 100 lbs. 5.35 - 5.60
Sales zones are (1) Atl. states E. of Miss., R and N of south bound of Ky. and Va., Ala., La., and Miss., south of 31°; Tex. E. of 100°; S. of 31° Fla.; also Me., N. H. and Vt. in which there are special county zones; Davenport, Ia., and St. Louis; (2) Ark. E. of 98° Ga.; Iowa (except Davenport) Minn., Mo. (except St. Louis) Neb. E. of 98°, N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No. of 31°; (3) Ark. W. of 98°, Kan., Neb. W. of 98° N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso, Tex.
Sodium sesquisilicate, anhyd., bgs., c.l., t.l., works 100 lbs. 5.70 - —
dms., c.l., t.l., works 100 lbs. 6.20 - —
Sodium sesquisilicate, hydrated, bgs., c.l., works 100 lbs. 5.00 - —
bgs., 6,000-19,900 lb. lots, works 100 lbs. 5.35 - —
dms., c.l., works 100 lbs. 5.50 - —
dms., 6,000-19,900 lb. lots, works. 100 lbs. 5.85 - —
Sodium silicate, liq., 40° Be., 1:3.2, turbid, dms., c.l., works. 100 lbs. 1.65 - —
dms., l.c.l., works 100 lbs. 1.90 - 2.40
tanks, works 100 lbs. 1.20 - —
47° Be., 1:2.9, turbid, dms., c.l., works 100 lbs. 2.25 - —
dms., l.c.l., works 100 lbs. 2.60 - 3.45
tanks, works 100 lbs. 1.90 - —
52° Be, 1:2.4, turbid, dms., c.l., works 100 lbs. 2.65 - —
dms., l.c.l., works 100 lbs. 3.00 - 3.50
tanks, works 100 lbs. 2.50 - —
Solid, 1:3.2, bgs., works ton.67.50 - —
Sodium silicofluoride, bgs., c.l., works lb. .065 - —
bgs., l.c.l., works lb. .725 - —
Sodium silicofluoride in dms., 0.4c. per lb. higher
Sodium stannate, dms., works, frt. alld. E lb. .780 - .853
Sodium sulfa drugs (see Sulfa name).
Sodium sulfanilate, bbls., works lb. .22 - —
Sodium sulfate, Nº Vii, dried, powd., dms lb. .22½ - —
Tech., anhyd., bgs., c.l., dlvd. E. ton.54.00 - —
Tech., detergent, rayon grade, bgs., c.l., works ton.36.00 - —
bulk, c.l., works ton.32.00 - —
USP, cryst., fib. dms. lb. .17½ - .18
Sodium sulfhydrate, flake, 70-72%, dms., c.l., works, frt. equald lb. .07¼ - —
dms., l.c.l., same basis lb. .08¼ - —
Liq., 40-44%, tanks, works, 100% basis ton.130.00 - —
Sodium sulfide, flake, dms., c.l., works, E., frt. equald lb. .06 - —
dms., l.c.l., same basis lb. .07 - —
Fused, bbls., c.l., works, E., frt. equald lb. .05¼ - —
bbls., l.c.l., same basis lb. .06½ - —

Sodium sulfite, anhyd., powd., bgs., c.l., works 100 lbs. 7.55 - —
bgs., l.c.l., same basis 100 lbs. 7.95 - —
Anhyd., tech., bgs., c.l., works. 100 lbs. 3.50 - —
bgs., t.l., same basis 100 lbs. 4.00 - —
Sodium sulfocyanide, CP (see Sodium thiocyanate).
Sodium tetraborate (see Borax).
Sodium tetrasulfide, liq., 40%, dms., c.l., works, frt. equald lb. .04½ - —
dms., l.c.l., same basis lb. .05½ - —
Sodium thiocyanate, CP, dms. lb. .55 - .65
Tech., anhyd., dms., 1 ton lots or more, works lb. .317 - —
dms., less than ton lots, works lb. .327 - —
Sodium thiosulfate, NF, cryst., bbls. lb. .13½ - —
Tech., anhyd., 100-lb. bgs., c.l., t.l., frt. equald 100 lbs. 7.75 - —
100-lb. bgs., l.c.l., t.l.c., frt. equald 100 lbs. 8.15 - —
Sodium thiosulfate, tech., anhyd., photo grade, 64-lb. bgs., c.l., t.l., frt. equald lb. .0775 - —
64-lb. bgs., l.c.l., t.l.c., frt. equald lb. .0815 - —
Tech., pentahydrate, photo grade, 100-lb bgs., c.l., t.l., frt. equald 100 lbs. 4.95 - —
Sodium thiosulfate, tech., pentahydrate, photo grade, 100-lb. bgs., l.c.l., t.l.c., frt. equald 100 lbs. 5.20 - —
Sodium titanate, cms., c.l., works. lb. .14¼ - —
cms., 5-ton lots, works lb. .14½ - —
cms., 1-ton lots or less, works lb. .14¾ - —
Sodium trichloroacetate, 90%, 100-lb. dms., c.l., frt. alld. E. lb. .35 - —
50-lb. dms., c.l., frt. alld. E lb. .35½ - —
10-lb. cns., c.l., frt. alld. E lb. .42 - —
Prices on Sodium trichloroacetate W. of the Rockies are 1¾c. per pound higher.
Sodium tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. 8.16 - —
bgs., l.c.l., same basis 100 lbs. 8.56 - 9.06
Sodium trisilicate, powd., 1:3.2, bgs., c.l., works 100 lbs. 8.95 - —
bgs., l.c.l., works 100 lbs. 9.70 - 13.13
dms., c.l., works 100 lbs. 9.45 - —
dms., l.c.l., works 100 lbs.10.20 - 10.60
Sodium tungstate, tech., kgs., dlvd. E lb. 1.32 - —
Sodium-ammonium phosphate, purif., cryst., dms., works lb. .52 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium - formaldehyde sulfoxylate, dms., c.l., dlvd lb. .21 - —
dms., l.c.l., same basis lb. .21½ - —
Sodium-zirconyl sulfate, f.b. dms., 1,000-lb. lots or more works lb. .28 - —
fib. dms., smaller lots, same basis lb. .30 - —
Solvent naphtha, coaltar, high-flash, tanks, frt. equald gal. .30 - .35½
Solvent naphtha, petroleum, straight aromatic, 310°-360°F. b.r., 14°-16°C. m.a.p., tankcars, New Jersey and New York gal. .31 - —
Houston, Texas gal. .29 - —
355°-420°F. b.r., 17°-18°C. m.a.p., tankcars, New Jersey and New York. gal. .32 - —
Houston, Texas gal. .30 - —
Solvent naphtha, petroleum, partial aromatic, 211°-255°F. b.r., 31°C. m.a.p., tankcars, New Jersey and New York gal. .235 - —
286°-340°F. b.r., 22°C. m.a.p., tankcars, New Jersey and New York gal. .275 - —
319°-380°F. b.r., 27°C. m.a.p., tankcars, New Jersey and New York gal. .285 - —
322°-395°F. b.r., 23°C. m.a.p., tankcars, New Jersey and New York gal. .295 - —
Sorbital, powd., dms., c.l., works lb. .36 - —
dms., 1 to 5-ton lots, works. lb. .38 - .39
Soln., coml., aqueous, dms., c.l., works lb. .24¼ - —
dms., ton lots, works lb. .25 - —
dms., smaller lots, works lb. .25¼ - —
tanks, works lb. .23¼ - —
Sorbitan monostearate, fib. dms., 20,000-lb. lots, works lb. .33 - —
Sorbitan monostearate, fib. dms., 10,000 to 20,000-lb. lots, works lb. .35 - —
fib. dms., smaller lots, works lb. .38 - .40
Sorbitan tristearate, fib. dms., 20,000-lb. lots, works lb. .34 - —
fib. dms., 10,000 to 20,000-lb. lots, works lb. .36 - —
fib. dms., smaller lots, works lb. .39 - .41
Sorbitol, NF, reg., 70% aqueous, dms., c.l., works lb. .18 - —
dms., l.c.l., works lb. .19 - —
tanks, works lb. .16½ - —
cryst., resin grade, pellets, dms., c.l., works lb. .23 - —
dms., 1 to 5-ton lots, works. lb. .25 - .26
Soya protein, chemically isolated, old process, bgs., c.l., works. lb. .23 - —
bgs., l.c.l., works lb. .23¼ - .23½
Chemically isolated, new process, bgs., c.l., works lb. .20 - —
bgs., l.c.l., works lb. .20¼ - .29½
Soybean meal, 44%, bulk, unrestricted, Decatur ton.52.00 - —
Soybean oil, crude, tanks, Decatur, lb. .08¾ - —
Foots, soapstock, acid 95%, tanks, N. Y. lb. .05½ - —
Refd., alkali, dms. lb. .1292 - .1325
tanks lb. .1092 - —
Clarified, dms lb. .1242 - .1275
tanks lb. .1042 - —
Salad, dms. lb. .1275 - .13
tanks lb. .1075 - —
Soybean oil acids, dbl. dist., dms., lb. .17 - .19½
tanks lb. .14¼ - —
S. D., dms. lb. .15¾ - .16¼
tanks lb. .13¾ - —
Sparteine sulfate, cns., 100 oz. or more oz. .80 - —
Spearmint leaves, dom., bls lb. .75 - —
Spearmint oil, NF, dms. lb. 9.00 - 11.75
Sperm oil, bleached, winter, 45°, dms lb. .1475 - .1575
tanks lb. .1275 - —
Nat., winter, 46°, dms lb. .1375 - —
tanks lb. .1175 - —
Spermaceti wax, blocks, cs lb. .31 - .33
Cakes, cs. lb. .32 - .34
Spruce oil, cns., dms. lb. 2.10 - 3.55

Squill, white, bls. lb. .16 - .18
Powd., bbls., bxs. lb. .17 - .20
St. John's bread, edible, bls. lb. .17 - —
Stannic chloride, anhyd., dms., works lb. .808 - .830
Stannic oxide, dms., dlvd. lb. 1.07½ - 1.08½
Stannous chloride, anhyd., dms., works lb. 1.001 - 1.296
Hydrous, cryst., dms., works lb. .86½ - .87½
Stannous sulfate, dms., works lb. 1.056 - 1.076
Star root (see Helonias root).
Stargrass root (see Aletris root.)
Stavesacre seed, bgs. lb. .60 - .61
Stearic acid, dbl., pressed bgs lb. .15¾ - .18¼
Single-pressed, bgs., lb. .15¼ - .17¾
Triple-pressed, bgs. lb. .17½ - .20
Stearine, oleo (see Oleostearine.)
Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York gal. .18 - —
tanks, Houston gal. .1475 - —
tanks, group 3 gal. .12875 - —
Stramonium leaves, bgs. lb. .13 - —
Streptomycin sulfate, bulk, gram. .035 - .036
Strontium bromide, NF, cryst., 100-lb. dm., f.o.b. E lb. .92 - —
Strontium carbonate, pure, dms., 5-ton lots or more, works lb. .35 - —
dms., 1-ton lots, works lb. .37 - —
Tech., dms., works lb. .19 - —
Strontium chromate, fib. dms., dlvd. lb. .48 - —
Strontium iodide, jars, 25-lb. lots fb. 3.57 - —
Strontium nitrate, bgs., c.l., works. 100 lbs.11.00 - —
bgs., l.c.l., works 100 lbs.12.00 - —
Strontium salicylate, NF, dms lb. 1.88 - —
Strontium sulfate, air floated, 90%, 325 mesh, bgs., works. ton.56.70 - 66.15
Strophanthin G (see Quabain, USP).
Strophanthin K, bots. oz.25.00 - 25.50
Strophanthus seed, Kombi, biologically tested, bgs lb. 3.50 - 3.75
Styrax gum, USP, cs. lb. 4.50 - 5.50
Styrene monomer, polymer grade, 99.6%, dms., c.l., frt. alld. lb. .17 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .14½ - —
Tech., 99.2%, dms., c.l. lb. .1472 - —
dms., l.c.l., same basis lb. .1672 - —
tanks, bulk, same basis lb. .1222 - —
Above prices are escalated for each calendar quarter on the basis of cost of crude oil at the well, cost of petroleum refining labor, and prices in the three major sections of the Wholesale Commodity Price Index.
Styrolyl acetate, bots. lb. 1.25 - 1.45
Succinic acid, purif., cryst., dms., t.l., frt. alld lb. .62 - —
dms., l.t.l., same basis lb. .63 - .75
Succinic anhydride, dms., c.l., t.l., dlvd lb. .51 - —
dms., l.c.l., same basis lb. .52 - —
Sucrose, refd., white, bgs., refy E. lb. .0920 - —
Sucrose acetate, isobutyrate, 90%, dms., t.l., dlvd lb. .33½ - —
dms., l.t.l., same basis lb. .35 - —
tanks, same basis lb. .31 - —
100%, t.l., dms., dlvd. lb. .35½ - —
l.t.l., dms., same basis lb. .37 - —
Sucrose octa-acetate, denaturing grade, 100-200-lb. lots, bgs., l.c.l., works lb. 1.00 - —
Sugar (see Sucrose).
Sugar cane, wax, dom., refd., slabs, 80-lb. ctns., works lb. .60 - .65
80-lb. ctns., spot lb. .65 - .75
Sulfabenzamide, cms. kilo. 8.80 - 9.90
Sulfabenzamide-sodium, dms. kilo. 9.00 - 10.10
Sulfacetamide, USP, fib. dms kilo. 6.61 - 6.83
Sulfacetamide-sodium, USP, fib. dms kilo. 8.15 - 9.25
Sulfadiazine, USP, microcrystals, dms kilo.23.35 - 24.45
USP, powd., dms. kilo.22.60 - 23.70
Sulfadiazine-sodium, USP, dms kilo.24.80 - 25.90
Sulfaguanidine, NF X, dms kilo. 5.50 - 6.60
Sulfamerazine-sodium, USP, powd., dms kilo.24.80 - 25.90
Sulfamethazine, USP XV, microcrystals, dms kilo.19.65 - 20.75
USP XV, powd., dms. kilo.18.75 - 19.85
Sulfamic acid, cryst., dms., c.l., t.l., works 100 lbs.16.00 - —
dms., l.c.l., l.t.l., works 100 lbs.17.50 - 18.50
Gran., dms., c.l., t.l., works. 100 lbs.14.75 - —
dms., l.c.l., l.t.l., works 100 lbs.16.25 - 17.25
Sulfanilamide, NF, reg., 1,000 lb., frt. equald lb. 1.50 - —
NF, fib. dm., frt. equald lb. 1.55 - —
Sulfanilamide quinoxaline, veterinary, dms kilo.16.28 - —
Sulfanilic acid, tech., dms., c.l., frt. alld lb. .21 - —
dms., l.c.l., frt. alld lb. .23 - —
Sulfapyridine, USP XV, powd., bots., tins kilo.15.45 - 16.55
Sulfapyridine-sodium, monohydrate, dms kilo.16.55 - 17.65
Sulfathiazole, NF X, microcrystals, dms kilo. 6.25 - 6.90
NF X, powd., dms. kilo. 5.50 - 6.15
Sulfathiazole-sodium, NF X, dms., 1,000-lb. lots or more lb. 2.35 - —
Sulfur, coml., flour, bgs., mines. 100 lbs. 2.35 - —
bbls., mines 100 lbs. 3.30 - —
lump, bgs., mines 100 lbs. 2.25 - —
bbls., mines 100 lbs. 2.80 - —
Crude, dom., bright, bulk, f.o.b. cars, mines, long-ton.23.50 - —
Crude, export, f.o.b. vessels, Gulf ports, long-ton.25.00 - —
US and Canada, f.o.b. vessels Gulf ports long-ton.25.00 - —
Domestic dark sulfur prices are $1 per long-ton lower.
Sulfur, crude, imp., Mexican, bulk, filtered, f.o.b., vessel, Coatzacoalcos long-ton.24.00 - —
Mexican dark sulfur price is $1 per long-ton lower.
Sulfur, refd., flowers, NF, bgs., mines 100 lbs. 5.65 - —
bbls., mines 100 lbs. 7.00 - —
flour, light, bgs., mines 100 lbs. 5.25 - —
bbls., mines 100 lbs. 6.25 - —
lump, bgs., mines 100 lbs. 4.95 - —
rolls, bgs., mines 100 lbs. 5.50 - —
bbls., mines 100 lbs. 6.25 - —
salt block, bgs., mines 100 lbs. 4.65 - —
virgin block, bbls., mines 100 lbs. 4.70 - —
Sulfur, rubbermakers, coml., reg., bgs., mines 100 lbs. 2.45 - —
bbls., mines 100 lbs. 3.70 - —
98-100%, passing through 325 mesh, bgs., mines 100 lbs. 2.55 - —
bbls., mines 100 lbs. 3.80 - —
refd., bgs., mines 100 lbs. 4.90 - —
bbls., mines 100 lbs. 6.05 - —
treated, 2.5% mineral oil, bgs., mines 100 lbs. 2.75 - —
bbls., mines 100 lbs. 4.00 - —
Sulfur dichloride, ref. dms., c.l., works, frt. equald lb. .05¼ - —
ref. dms., l.c.l., same basis lb. .06¼ - —
tanks, same basis lb. .04½ - —
Sulfur dioxide, liq., coml., cyls., works, frt. equald lb. .10 - .12
multi-unit cars, works lb. .0535 - —
tanks, works lb. .045 - —
Sulfur dioxide, refrigeration, cyls., dlvd lb. .33 - —
Sulfur monochloride, 55-gal. non-ret. dms., c.l., frt. equald lb. .05¼ - —
dms., l.c.l., same basis lb. .06¼ - —
tanks, same basis lb. .04½ - —

Sulfuric acid, 60° Be, cbys., c.l., works 100 lbs. 2.00 - —
cbys., l.c.l., works 100 lbs. 2.30 - —
tanks, works ton.18.60 - —
66° Be, cbys., c.l., works 100 lbs. 2.25 - —
cbys., l.c.l., works 100 lbs. 2.55 - 3.35
tanks, works ton.22.35 - —
98%, tanks, works ton.23.50 - —
99%, tanks, works ton.23.70 - —
100%, tanks, works ton.23.95 - —
CP, NF, consumers' cbys., c.l., frt. equald lb. .12¾ - —
Sulfuric acid, CP, NF, consumers', cbys., l.c.l., same basis, lb. .14¼ - .14¾
5-pt. bots., extra, cs., c.l., works, frt. alld lb. .16¼ - —
5-pt. bots., extra, cs., l.c.l., same basis lb. .17¾ - .18¾
Sulfuric acid, fuming (oleum), 20%, tanks, works ton.25.00 - —
40%, tanks, works ton.29.00 - —
65%, tanks works ton.39.50 - —
Superphosphate, run-of-pile under 22% a.p.a., pulv., bulk, c.l., Baltimore unit-ton. .90 - .93
bulk, c.l., Carteret, N. J. unit-ton. .90 - .93
bulk, f.o.b. vessel at Fla. unit-ton. 1.03 - —
Superphosphate, triple, 48% or more a.p.a., pulv., bulk, c.l., East Tampa, Fla unit-ton. .98 - —
Sweet birch oil, USP, northern, cns lb. 4.00 - 9.50
USP, southern, cns lb. 2.00 - 3.05

T

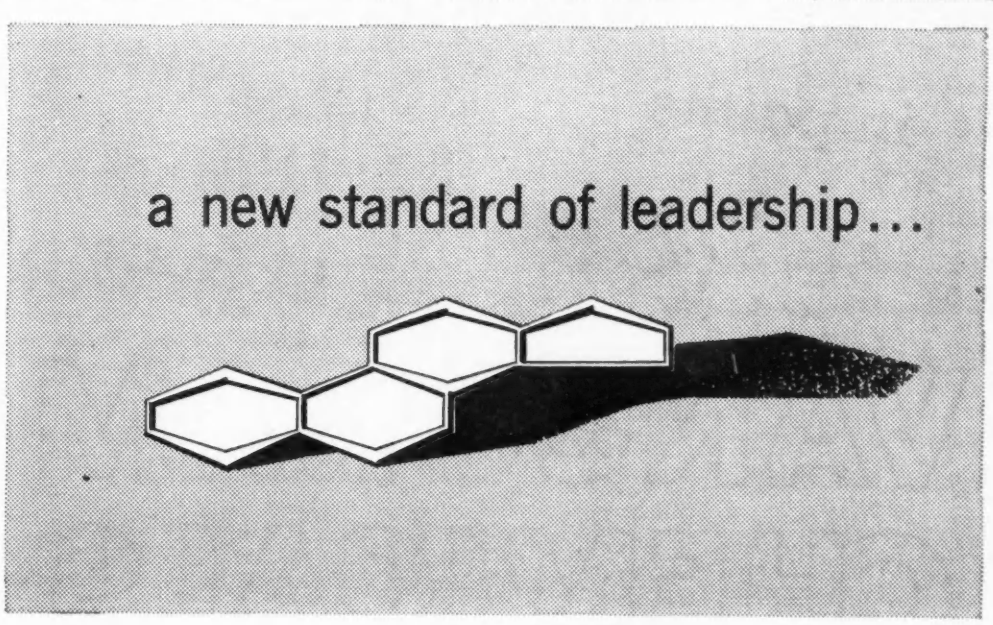
2,4,5-T, dms., c.l., works, frt. equald. lb. 1.18 - —
dms., l.c.l., same basis lb. 1.25 - —
2,4,5-T, isopropyl ester, dms., c.l., works, frt. equald lb. 1.24 - —
dms., l.c.l., works lb. 1.29 - —
Talc, dom., fibrous, grd., bgs., c.l., works, New York ton.28.00 - —
bgs., l.c.l., works ton.31.00 - 36.00
fibrous, 99.5%, 325 mesh, bgs., c.l. works, New York ton.31.00 - —
bgs., l.c.l., works ton.34.00 - —
fibrous, 99.95%, 400 mesh, micronized, bgs., c.l., works. ton.38.00 - —
625 mesh, micronized, bgs., c.l., works ton.80.00 - —
ord., Calif., grd., bgs., c.l., works ton.34.00 - 39.50
Vermont, off-color, grd., bgs., c.l., works ton.19.40 - —
bgs., l.c.l., works ton.37.00 - —
Imp., Canadian, grd., bgs., c.l., mines ton.20.00 - 35.00
Tall oil, crude, dms., c.l., works lb. .04¼ - .04¾
tanks, works lb. .02¾ - .03
Dist., depending on grade, dms., c.l., works lb. .06¾ - .07¾
dms., l.c.l., works lb. .07 - .03
tanks, works lb. .04¾ - .05¾
Refd., depending upon grade, dms., c.l., works lb. .07¼ - .09
dms., l.c.l., works lb. .07½ - .09¼
tanks, works lb. .05¼ - .06¾
Tall oil acids, dms., c.l., works lb. .07 - .08
dms., l.c.l. lb. .07¼ - .08¼
tanks, works lb. .05 - .05
Tallow, edible, tanks, dlvd lb. .08¾ - .08½
Inedible, fancy, bleachable, tanks, lb. .05¾ - —
fancy, guaranteed, bulk, f.o.b. steamer lb. .08¼ Nom.
dms., f.a.s. lb. .07¼ Nom.
tanks, dlvd. lb. .06 —
No. 1, tanks, dlvd. lb. .05½ —
Prime, tanks, dlvd. lb. .05½ —
Special tanks, dlvd. lb. .05⅝ —
Sulfonated, 25%, bbls., l.c.l. lb. .08½ - .08¾
50%, bbls., l.c.l. lb. .10½ - .11
Tallow acids, dist., dms. lb. .13¼ - .15¾
tanks lb. .10¾ —
Hydrogenated, dms. lb. .14¾ - .17¼
Tallow oil, acidless, dms., c.l. lb. .13½ Nom.
dms., l.c.l. lb. .14½ - .16
Tangerine oil, Florida, dms lb. 4.75 - —
Tankage, animal, feeding, 9-11% ammonia, New York bulk, unit-ton. 5.25 - 5.75
Tannic acid, NF, fluffy, bbls., 1,000-lb. lots lb. 2.05 - —
bbls., smaller lots lb. 2.06 - 2.07
NF, powd., bbls., 1,000-lb. lots lb. 1.95 - —
bbls., smaller lots lb. 1.96 - 1.99
Tech., dms. lb. 1.05 - —
Tansy oil, dms lb. 6.60 - 8.00
Tar acid oil, 15-18%, dms., c.l., frt. equald gal. .53½ - —
dms., l.c.l., same basis gal. .55½ - —
tanks, same basis gal. .43½ - —
Tar acid oil, 25-28%, dms., c.l., same basis gal. .60 - —
dms., l.c.l., same basis gal. .62 - —
tanks, same basis gal. .50 - —
50-53%, dms., c.l., same basis gal. .75 - —
dms., l.c.l., same basis gal. .77 - —
tanks, same basis gal. .65 - —
Tar, coal (see Coaltar).
Tartar emetic (see Antimony potassium tartrate).
Tartaric acid, NF, 100-lb. bgs., c.l., frt. equald lb. .41 - —
bgs., 10,000 lbs., 1 shipt., same basis lb. .43 - —
bgs., smaller lots, same basis lb. .47 - —
Terpine hydrate, NF, cryst., powd., 100-lb. fib. dms lb. .70 - —
Terpineol, extra, dms lb. .50 - .60
Prime, dms. lb. .40 - .50
Terpinyl acetate, extra, cns., dms. lb. .64 - .75
Prime, dms. lb. .53 - .56
Terpinyl propionate, dms. lb. 1.70 - —
Terra alba (see Gypsum).
Testosterone, USP, bots. gram. No prices.
Testosterone propionate, USP, bots. gram. No prices.
Tetrachloroethane, dms., works lb. .14½ - —
Tetrasodium pyrophosphate (see Sodium pyrophosphate).
Tetrachloroethylene, tech. (see Perchloroethylene).
Tetrachloroethylene, USP, 55-gal. dms., c.l., t.l., works lb. .20½ - —
dms., l.c.l., works lb. .22 - .23¼
Tetraethyl orthosilicate, dms., c.l., dlvd. E lb. .60 - —
dms., l.c.l., dlvd. E lb. .61½ - —
Tetraethyl pyrophosphate, 40%, cns., dms., frt. equald lb. .75 - —
Tetraethylenepentamine, dms., c.l., dlvd. E lb. .53½ - —
dms., l.c.l., dlvd. E lb. .55 - —
tanks, dlvd. E lb. .51 - —
Tetraethylthiuram disulfide, tech., dms., frt. alld lb. 1.04 - —
Tetrahydrofuran, dms., c.l., t.l., works lb. .36½ - —
dms., l.c.l., or l.t.l., works lb. .37 - —
tanks, works lb. .35 - —
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn. lb. .31½ - —
dms., l.c.l., Memphis, Tenn lb. .32½ - —
dms., c.l., t.l., Newark, N.J. lb. .33½ - —
dms., l.c.l., Newark, N.J. lb. .34½ - —
tanks, dlvd. E. of Denver lb. .31 - —
tanks, dlvd. W. of Denver lb. .32 - —

Tetrahydrophthalic anhydride, dms., c.l., t.l., frt. alld. E.	lb.	.39	—
l.c.l., l.t.l., same basis	lb.	.41	—
Tetrapotassium phosphate (see potassium phosphate).			
Thallium metal, dlvd.	lb.	7.50	-10.00
Thallium sulfate, 99%, bots., dlvd.	lb.	5.00	-10.00
Theobromine, NF, fib. dms., 100-lbs., f.o.b. works	lb.	4.40	- 4.75
Theobromine and sodium acetate, USP, fib. dms., 500-lbs. works	lb.	6.45	—
Theobromine, sodio-salicylate, NF, fib. dms., 500-lbs., works.	lb.	3.80	—
Theophyline, USP, anhyd., 100-lb. dms., frt. alld	lb.	3.65	—
Thiamine hydrochloride, USP, fib. dms., frt. alld	kilo.	36.00	—
USP, ampule grade, fib., dms., frt. alld	kilo.	38.00	—
Thiamine mononitrate, USP, fib. dms., frt. alld	kilo.	36.00	—
Thiocarbanilide, dms., ton lots	lb.	.72	—
dms., less ton lots	lb.	.74	—
Thiodiphenylamine (see Phenothiazine).			
Thioflavin green toner, brilliant, molybdated, PMA, kgs., works	lb.	5.20	—
Tungstated, PTMA, kgs., works	lb.	6.20	—
Thioglycolic acid, refd., 55 gal. dms., ton lots, 100% basis	lb.	1.15	—
Thiosalicylic acid, 80%, dms., 1,000-lb., lots, works	lb.	4.00	—
Thiourea, tech., bgs., t.l., frt. alld.	lb.	.30	—
bgs., ton lots, same basis	lb.	.32	—
bgs., less than ton lots, same basis	lb.	.33	—
Thorium nitrate, purif., fib. dms., 100-lb. lots or more, works	lb.	3.50	—
dl-Threonine, bots., 1-kilo lots	kilo.	275.00	—
Thyme leaves, French, bgs.	lb	.29	—
Spanish, bgs.	lb.	.11	—
Thyme leaves, bgs.	lb.	.29	—
Spanish, bgs.	lb.	.11	—
Thyme oil, NF, red, cns., dms	lb.	1.90	- 2.25
NF, white, cns.	lb.	2.20	- 2.60
Tech., white, cns.	lb.	.40	- 1.85
Thymol, fib. dms., 25-lbs., f.o.b. works	lb.	3.06	—
Thymol iodide, NF, dms., 100-lbs. f.o.b. works	lb.	7.40	—
Timbo root (see Cube root).			
Tin chloride (see Stannous chloride, anhyd.).			
Tin crystals (see Stannous chloride, hydrous).			
Tin metal (Straits)	lb.	1.01	—
Tin oxide (see Stannic oxide).			
Tin sulfate (see Stannous sulfate).			
Tin tetrachloride, anhyd. (see Stannic chloride, anhyd.).			
Titanium dioxide, anatase, ceramic, bgs., c.l., dlvd.	lb.	.25½-	—
bgs., l.c.l., dlvd.	lb.	.26½-	—
reg., bgs., c.l., dlvd.	lb.	.25½-	—
bgs., l.c.l., dlvd.	lb.	.26½-	—
metallurgical, nat., bgs., c.l., f.o.b. Jacksonville, Fla.	ton.	180.00	—
bgs., 5-ton lots, Niagara Falls, N. Y.	ton.	205.00	—
bgs., ton lots, same basis.	ton.	215.00	—
Milled metallurgical titanium dioxide $7.50 per ton higher.			
Titanium dioxide, rutile, nonchalking, bgs., c.l., dlvd. E.	lb.	.27½-	—
bgs., l.c.l., dlvd. E.	lb.	.28½-	—
Titanium dioxide-calcium pigment, 30% Ti O_2, reg., bgs., c.l., dlvd.	lb.	.09⅜-	—
bgs., l.c.l., works	lb.	.09⅞-	—
50% Ti O_2, high-tinting, dms., c.l.,	lb.	.14⅜-	—
dms., l.c.l.	lb.	.14⅞-	—
Titanium hydride, powd., dms., works	lb.	8.10	- 9.00
Titanium tetrachloride, tech., dms., c.l., works	lb.	.26	—
dms., l.c.l., works	lb.	.27½-	.29
tanks, works	lb.	.20	—
Tobias acid, dms., c.l., t.l.	lb.	.78	—
dms., l.c.l.	lb.	.81	—
d-a-Tocopherols, NF, mixer, conc., pure basis, bots.	kilo.	67.00	—
d-a-Tocopheryl acetate, NF, conc., pure basis, bots.	kilo.	122.00	—
d-a-Tocopheryl acid succinate, cryst., bots.	kilo.	109.00	—
dl-a-Tocopherol, bots.	kilo.	99.00	—
dl-a-Tocopheryl acetate, bots.	kilo.	90.00	—
25% dry, powd., bots.	kilo.	22.50	-24.00
33⅓% dry, powd., bots.	kilo.	30.00	-31.50
o-Tolidine base, dry, kgs., 100% basis	lb.	1.55	—
Paste, kgs., 100% basis	lb.	1.50	—

TOLUOL

Toluol quotations, both coaltar and petroleum, may be found under Toluene.

o-Tolidine, hydrochloride paste, kgs., 100% basis	lb.	1.50	—
Tolu balsam, cns.	lb.	3.50	- 3.65
Toluene, coaltar, indust., or nitration, tanks, dlvd. E. of Rockies	gal.	.25	—
Toluene, petroleum, indust., tanks, dlvd. E. of Rockies	gal.	.25	—
p-Toluenesulfonamide, powd., dms., t.l., works	lb.	.60	—
dms., l.t.l., same basis	lb.	.63	—
Toluenesulfonic acid, 55-gal. dms., t.l., frt. alld.	lb.	.16	—
1,000-lb. or more, same basis	lb.	.18	—
less than 1,000-lb., same basis	lb.	.23	—
tanks, same basis	lb.	.14	—
Toluenesulfonic acid in 10-gal. dms., 2c. per lb. more.			
p-Toluenesulfonic acid monohydrate, dms., c.l., or t.l.	lb.	.90	—
dms., 125 lbs. to t.l.	lb.	1.00	—
m-Toluidine, dms., c.l., works, frt. alld.	lb.	.83	—
dms., l.c.l., same basis	lb.	.84	—
tanks, same basis	lb.	.82	—
o-Toluidine, dms., c.l., works, frt. alld.	lb.	.30	—
dms., l.c.l., same basis	lb	.31	—
tanks, same basis	lb.	.28	—
p-Toluidine, tech., flake, dms., frt. alld.	lb.	.50	—
Cast, dms., frt. alld.	lb.	.45	—
p-Toluidine-m-sulfonic acid, dms., works	lb.	.82	- 1.04
Toluidine red toner, deep shades, kgs., works	lb.	1.70	—
Light shades, kgs, works	lb.	1.70	—
2,4-Tolylenediamine, cryst., fib. dms., l.c.l., frt. alld.	lb.	1.10	—
Tonka beans, Angostura, cks.	lb.	1.50	—
Brazilian, Surinam, cs.	lb.	1.30	—
Totaquine, 100-oz. lots, cns.	oz.	.42	—
Toxaphene, dms., c.l., t.l., works.	lb.	.22	—
dms., l.c.l., l.t.l., works	lb.	.23	—
Tragacanth gum, No. 1, ribbons, cs.	lb.	3.85	- 3.90
No. 2, cs.	lb.	3.40	- 3.60
No. 3, cs.	lb.	3.15	- 3.25
USP, powd., bbls.	lb.	1.05	- 1.15
Triacetin dms., c.l., dlvd. E. of Rockies	lb.	.39	—
dms., l.c.l., same basis	lb.	.40	—
tanks, same basis	lb.	.37	—
Triallylamine, dms., c.l., dlvd.	lb.	.985	—
dms., l.c.l., dlvd.	lb.	.995	—
tanks, dlvd.	lb.	.96	—
Tributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver.	lb.	:42½-	—
non-ret. dms., l.c.l., frt. alld. E. of Denver	lb.	.43½-	—
tanks, frt. alld. E. of Denver	lb.	.40	—
Tributyl phosphate, dms., c.l., works.	lb.	.52½-	—
dms, l.c.l., same basis	lb.	.53½-	—
tanks, same basis	lb.	.50	—
Tributylamine dms., c.l., works	lb.	.67½-	—
dms., l.c.l., same basis	lb.	.69	—
tanks, same basis	lb.	.65	—
Tributyrin, dms., l.c.l., dlvd.	lb.	.69	—
Trichloroacetic acid, bots	lb.	2.00	- 2.50
Trichlorobenzene, dms., c.l., frt. alld. E.	lb.	.15	—
dms., l.c.l., frt. alld. E.	lb.	.16	—
tanks, frt. alld. E.	lb.	.13¼-	—
Trichlorobenzene prices in the West 1¾c. higher.			
1,1,1-Trichloroethane, dms., c.l., dlvd.	lb.	.13¼-	—
dms, l.c.l., dlvd.	lb.	.16¼-	—
tanks, dlvd.	lb.	.12¼-	—
1,1,2-Trichloroethane, dms., c.l., works	lb.	.13½-	—
dms., l.c.l., dlvd. E.	lb.	.14¼-	—
tanks, works	lb.	.11½-	—
Trichloroethylene, dms., c.l., or t.l., dlvd.	lb.	.14	—
dms., l.c.l., dlvd.	lb.	.15¼-	—
tanks, dlvd.	lb.	.12¾-	—
Trichloroisocyanuric acid, dms., c.l., t.l., frt. equald.	lb.	.65	—
dms., l.c.l., same basis	lb.	.75	—
Trichlorophenoxyacetic acid (see 2,4,5-T).			
Tricholine citrate, 65% soln., ret. cbys., works, frt. adjusted.	lb.	1.40	- 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd.	lb.	.35	—
dms., l.c.l., dlvd.	lb.	.36	—
tanks, dlvd.	lb.	.32½-	—
Tricresyl phosphate, petroleum, dms., c.l., dlvd.	lb.	.34½-	—
dms., l.c.l., dlvd	lb.	.35½-	—
tanks, dlvd.	lb.	.32½-	—
Tridecyl alcohol, mixed isomers, dms., c.l., dlvd. E.	lb.	.26½-	—
dms., l.c.l., dlvd. E.	lb.	.28	—
tanks, dlvd. E.	lb.	.24	—
Triethanolamine, dms., c.l., dlvd. E.	lb.	.24½-	—
dms., l.c.l., same basis	lb.	.26	—
tanks, same basis	lb.	.22	—
Triethanolamine lauryl sulfate, dms., c.l., t.l., frt. alld.	lb.	.25½-	—
dms., l.t.l., frt. alld.	lb.	.26½-	—
tanks, frt. alld.	lb.	.24½-	—
Triethylamine, dms., c.l., dlvd. E.	lb.	.50	—
dms., l.c.l., same basis	lb.	.51½-	—
tanks, same basis	lb.	.47½-	—
Triethyl nitrate, refd., tech., non-ret. dms., c.l., frt. alld. E. of Denver	lb.	.46¼-	—
non-ret. dms., l.c.l., frt. alld. E. of Denver	lb.	.47¼-	—
tanks, frt. alld. E. of Denver.	lb.	.43¾-	—
Triethyl phosphate, dms., c.l., dlvd.	lb.	.40½-	—
dms., l.c.l., dlvd.	lb.	.41¼-	—
tanks, dlvd.	lb.	.38	—
Triethylene glycol, dms., c.l., dlvd. E.	lb.	.21	—
dms., l.c.l., dlvd. E	lb.	.22½-	—
tanks, same basis	lb.	.18½-	—
Triethylenetetramine, dms., c.l., dlvd. E.	lb.	.51½-	—
dms., l.c.l., dlvd. E	lb.	.53	—
tanks, dlvd. E	lb.	.49	—
Triisobutylene, tanks, dlvd.	lb.	.08	—
Tri-isopropanolamine, dms., c.l., dlvd. E.	lb.	.23¼-	—
dms., l.c.l., dlvd. E.	lb.	.24¾-	—
tanks, dlvd. E.	lb.	.20¾-	—
Trimethylamine, anhyd., cyls., l.c.l., frt. equald, 100% basis	lb.	.30	- .305
tanks, frt. equald, 100% basis.	lb.	.26	—
25-40% soln., dms., c.l., frt. equald, 100% basis	lb.	.35	—
dms., l.c.l., frt. equald, 100% basis	lb.	.35½-	—
tanks, 100% basis, frt. equald	lb.	.26	—
Trimethylolpropane, dms., c.l., t.l., dlvd. E.	lb.	.35	—
dms., l.c.l., l.t.l., same basis	lb.	.36	—
Trioxanes, pure, dms., c.l., t.l., works	lb.	.50	—
dms., l.c.l., works	lb.	.51½-	—
Tripentaerythritol, bgs., c.l., t.l., dlvd. E.	lb.	.40	—
bgs., l.c.l., l.t.l., dlvd. E.	lb.	.41	—
Triphenyl phosphate, bbls., c.l., frt. equald.	lb.	.41½-	—
bbls., l.c.l., frt. equald	lb.	.43½-	—
Triphenylguanidine, bbls., works	lb.	.90	—
Tripropylene, dms., c.l., dlvd. E.	gal.	.44	—
dms., l.c.l., same basis	gal.	.54	—
tanks, same basis	gal.	.23	—



HARDLY MORE THAN A DECADE AGO, Syntex made its first major contribution in the field of steroid hormones through the development of important new sources of supply — a development which has not only helped to satisfy today's large demand for these hormones, but has been a vital factor in reducing the cost of hormone intermediates.

Today Syntex continues to serve as an important supplier of hormones and intermediates to the pharmaceutical industry. By continued research and constant improvement of production techniques, Syntex has helped to raise the standards of quality and dependability in this significant field of medicine.

one great source of
steroid hormones and intermediates

SYNTEX

Write to: SYNTEX CHEMICAL COMPANY, INC.
10 East 40th Street, New York 16, N. Y.

Tripropylene Glycol—p-Xylene

Tripropylene glycol, dms., c.l., t.l., frt. alld. E lb. .20½- —
dms., l.c.l., l.t.l., frt. alld. E lb. .22 - —
tankcars and compartmented tankcars, frt. alld. E lb. .17½- —
tankwagon and compartmented tankwagons, 1,000 gals. min., frt. alld. E lb. .18 - —
Tripropylene glycol prices 1c. per lb. higher in west.
Trisodium phosphate (see Sodium phosphate tribasic).
dl-Tryptophane, fib., dms., works lb.55.00 - —
Tung oil, dms., c.l., New York lb. .24¾- .25¼
tanks, imported, N. Y. lb. .23¼- —
tanks, domestic, mills lb. .22⅛- .22¼
Tungsten metal, powd., 2.0-2.5 microns, dms., works lb. 4.25 - —
Tungstic acid, tech., dms., 1,000-lb. lots, works lb. 2.25 - —
dms., smaller lots, works lb. 2.45 - —
Turkey red, bbls., works lb. .62 - —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Turpentine oil, NF, ens., dms lb. .28 - .50
Tuscan red, bbls., frt. equald lb. .26 - .32
Tyrothricin, USP, 1 to 5 kilos gram. .54 - —

U

Ultramarine blue, cobalt type, dry or pulp, 250-lb. bbls., dlvd. E. of Rockies lb. .35 - .39½
Jobbing types, bbls., same basis lb. .19 - —
Regular types, dry bbls., same basis lb. .22½- .35
Ultramarine blue prices 1c. higher W. of Rockies.
Umber pigment, burnt, American, bgs., c.l., works lb. .07½- .07¾
bgs., l.c.l., works lb. .07¾- .08
Burnt, turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y. lb. .08¼- —
Raw, American, bgs., works lb. .07¾- .08¼
Turkey-type, bgs., works lb. .08½- .08¾
Undecylenic acid, dms. lb. 1.28 - —
Unicorn root, false (see Helonias root).
Unicorn root, true (see Aletris root).
Urea, 46% N, indust., bgs., c.l., t.l., dlvd. E ton.125.00 - —
bgs., l.c.l., dlvd. E. ex whse. ton.145.00 - —
45% N, agricultural, bgs., c.l., (30 tons) dlvd. E ton.103.00 - —
Urea-ammonia liquor A, B, C & F grades, N basis, tanks, frt. equald ton.120.00 - —
37 grade, tanks, same basis ton.145.00 - —
Urethane, USP, dms., t.l., f.o.b., works lb. .65 - —
dms., l.t.l., same basis lb. .70 - —
Uva-ursi leaves, bls lb. .12 - —

V

Valerian root, Belgian bgs. lb. .32 - —
Indian, bgs. lb. .25 - —
dl-Valine, dms., works lb.21.00 -27.50
Vanadium pentoxide, tech., dms., works lb. 1.28 - 1.33
Vandyke brown, bbls., works lb. .09½- .12
Vanilla beans, Bourbon, tins lb.12.75 - —
Mexican cuts, tins lb.13.00 - —
whole, tins lb.13.50 -13.75
Vanillin ex lignin, 100-lb. fib. dms., 1,000-lb. lots or more lb. 3.00 - —
100-lb. fib. dms., 500-lb. lots lb. 3.10 - —
100-lb. fib. dms., ens. 100-lb. lots lb. 3.25 - 3.35
Venetian red, jobbing, bgs., works. lb. .0475- —
Venetian red, 20%, bgs., works lb. .0525- —
25%, bgs., works lb. .0575- —
30%, bgs., works lb. .06 - —
35%, bgs., works lb. .0625- —
40%, bgs., works lb. .0675- —
Vetiver oil, Bourbon, ens. lb.17.25 -17.50
Haitian, ens. lb.14.50 -15.50
Victoria blue toner, molybdated, PMA 250-lb. bbls., dlvd. E. of Rockies lb. 4.50 - 4.95
Tungstated, PTMA, 250-lb. bbls., dlvd. E. of Rockies lb. 5.55 - —
Victoria blue toner, bbls., prices 1c. higher W. of Rockies.
Vinyl acetate monomer, zone 1, 55-gal. dms., c.l., dlvd lb. .20 - —
55-gal. dms., l.c.l., dlvd. lb. .21½- —
tanks, dlvd. lb. .17½- —
tanktrucks less than 4,000 gal., dlvd lb. .18 - —
Zone 2, 55-gal. dms., c.l., dlvd lb. .21 - —
55-gal. dms., l.c.l., dlvd. lb. .24 - —
tanks, dlvd. lb. .18½- —
tanktrucks, less than 4,000 gals., dlvd lb. .19 - —
Zone 1 is all continental US except zone 2, zone 2 comprises Ariz., Calif., Idaho, Mont., Nev., Ore., Utah and Wash.
Vinyl n-butyl ether, tech., dms., l.c.l., works lb. .80 - —
Vinyl chloride monomer, tanks, works lb. .125 - —
Vinyl ether USP, anethesia, bots., 50cc., hospitals bot. 1.12 - —
bots., 75cc., hospitals bot. 1.56 - —
Vinyl ethyl ether tech. dms., c.l., works lb. .29¼- —
dms., l.c.l., works lb. .30 - —
tanks, works lb. .27¼- —
Vinyl propionate monomer, dms., c.l., dlvd lb. .49 - —
dms., l.c.l., same basis lb. .50 - —
tanks, same basis lb. .47 - —
Vinyl trichloride (see Trichloroethane).
2-Vinylpyridine, 10 dms. to tanks, works lb. 1.20 - —
1 to 9 dms., works lb. 1.35 - —
tanks, works lb. 1.15 - —
Vinyltoluene, dms., c.l., f.o.b., works. lb. .16½- —
dms., l.c.l., same basis lb. .18½- —
tanks, f.o.b. dest. frt. prepaid lb. .14 - —
Viosterol in nat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units. .02½- —
Virginia type red, bbls., works lb. 1.40 - —
Vitiamin A acetate, syn., cryst., beads, 500,000 A units per gram gram .07¼- —
Vitamin A acetate, dry, 500,000 units per gram, kilo lots kilo.65.00 - —
325,000 units per gram, same basis kilo.43.88 - —
250,000 units per gram, same basis kilo.33.75 - —
Dry vitamin A acetate in less than kilo lots, $1.25 to $2.50 per kilo higher.
Vitamin A, liq. in oil, 1,000,000 A units per gram 1,000,000 units. .09½- —
Vitamin A palmitate, liq., 1,000,000-1,800,000 A units per gram 1,000,000 units. .09½- —
Vitamin B_1 (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast).
Vitamin B_{12}, cryst., USP (cyanocobalamin), 1-50 grams, vials, tins gram.120.00 - —
0.1% vitamin B_{12}, USP, adsorbed on gelatin, 100 and 500-gram bots on 1-5 kilo dms gram. 1.43 - —
0.1% vitamin B_{12}, USP adsorbed on resin, 100 and 500-gram bots., 1-5 kilo dms gram. 1.43 - —
Vitamin B_{12}, oral grade solids in containers of 1 and 10 gram of B_{12} activity gram.110.00 - —
0.1% trituration of cryst. B_{12} with dicalcium phosphate or mannitol, 1-10 kilo.138.00 - —
Vitamin B_{12}, 0.1% cobalamin concentrate, NF, adsorbed on resin, 500-gram bots., 1-5 kilo, dms., frt. alld gram. 1.15 - —
0.1% cobalamin concentrate in gelatin, 1-10 kilo, dms., frt. alld gram. 1.15 - —
Vitamin C (see Ascorbic acid).
Vitamin D (see Codliver and Fishliver oils, Calciferol and Viosterol).
Vitamin D, dry, 850,000 units per gram, kilo lots kilo.42.50 - —
650,000 units per gram less than kilo lots kilo.45.00 - —
Vitamin E (see a-Tocopherol and Wheat germ oil).
Vitamin H (see Biotin).
Vitamin K, active (see Menadione).
Violet methyl toner (see Methyl violet toner).
VM&P naphtha (see Naphtha, VM&P, petroleum).

W

Wahoo root bark, bls. lb. 2.00 - 2.25
Warfarin, 0.5%, dms., 50-lb. lots, dlvd lb. 1.95 - —
dms., 25-49-lb. lots, New York or Chicago lb. 2.05 - —
dms., 5-24-lb. lots, New York or Chicago lb. 2.15 - —
Watchung-type reds., bbls lb. 1.95 - —

WAXES
Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal. dms. gal.12.25 - —
White lead (see Lead, white).
White mineral oil (see Mineral oil, white).
White pine bark, rossed, bls. lb. .21 - .22
White precipitate, USP, powd., dms., 100 lbs., f.o.b. works lb. 5.50 - —
Whiting (see Calcium carbonate).
Wild cherry bark, thin, nat., bls lb. .22 - —
Thin, rossed, bls. lb. .22 Nom.
Wintergreen oil, USP nat. northern, ens lb. 6.35 -17.50
USP, nat. southern ens lb. 3.75 - 7.00
Wintergreen oil, syn. (see Methyl salicylate).
Witch hazel bark, bls lb. .16 - .17
Witch hazel leaves, bls. lb. .28 - .30
Wollastonite fine bgs., c.l., works. ton.39.50 - —
bgs., l.c.l. ex whse ton.56.00 - —
Medium, bgs., c.l., works ton.27.00 - —
bgs., l.c.l., ex whse. ton.44.00 - —
Wood alcohol (see Methanol).
Wood oil (see Tung oil).
Woolfat crude (see Degras).
Woolfat USP (see Lanolin).
Wormseed Levant bgs. lb. 2.50 - —
Wormseed oil (see Chenopodium oil NF).
Wormwood oil, ens lb. 4.75 - 5.00

X

Xylene coaltar, indust., tanks, works:
Bethlehem, Pa. gal. .29 - —
Birmingham dist. gal. .29 - —
Chicago dist. gal. .28½- —
Cleveland dist. gal. .29 - —
Geneva, Utah gal. .29 - —
Johnstown, Pa. gal. .29 - —
Lackawanna, N. Y gal. .29½- —
Lone Star, Tex. gal. .27 - —
Lorain, Ohio gal. .29 - —
Middletown, Ohio gal. .30 - —
Minnequa, Col. gal. .29 - —
Philadelphia dist. gal. .29 - —
Pittsburgh dist. gal. .29 - —
Sparrows Point, Md. gal. .29 - —
Terre Haute, Ind. gal .29 - —
Youngstown, Ohio gal. .29 - —
Xylene, petroleum, indust., tanks f.o.b. works:
Bayonne, N. J gal. .29 - —
Baytown, Tex. gal. .27 - —
Charleston, S. C. gal. .29 - —
Chicago, Ill gal. .28½- —
Detroit, Mich., dlvd gal. .27½- .29
Houston, Tex. gal. .27 - —
Philadelphia, Pa. gal. .29 - —
Providence, R. I. gal. .30 - —
Sewell's Point, Va. gal. .28 - —
Wood River, Ill. gal. .28½- —
m-Xylene, 95%, dms., c.l., frt. alld. lb. .25 - —
dms., l.c.l., frt. alld. lb. .25 - —
tanks, frt. alld. lb. .23 - —
o-Xylene, dms., c.l., works lb. .08 - —
dms., l.c.l., works lb. .09 - —
tanks, works lb. .06 - .03½
p-Xylene, dms., c.l., works lb. .20 - —
dms., l.c.l., works lb. .21 - —
tanks, frt. alld. lb. .1645- —

in catalysts
in paints
in ceramics
in plastics
in inks
VANCORAM CHEMICALS
in synthetic fibers
in petroleum products
in glass
in mordants...

In these and many other applications Vancoram Vanadium Chemicals are growing rapidly in importance, because of their dependability and versatility.

You Can Depend On...

VANCORAM AMMONIUM METAVANADATE
(Technical Grade)
Analysis: NH_4VO_3—99% min.

VANCORAM VANADIUM PENTOXIDE
(Technical Grade—Air-dried)
Analysis: V_2O_5—83/86%
(Technical Grade—Fused Flake)
Analysis: V_2O_5—88/92%
(Purified Grade)
Analysis: V_2O_5—99.6% approx.
(C. P. Grade)
Analysis: V_2O_5—99.9% approx.

VANCORAM SODIUM ORTHOVANADATE
(Technical Grade—$Na_3VO_4 \times H_2O$)
Typical analysis: V_2O_5—approx. 26.75%
Na_2O—approx. 22.60%

VANCORAM SODIUM METAVANADATE
(Technical Grade)
Typical analysis: V_2O_5—61.40%
Na_2O—20.90%

VANADIUM CHLORIDE—Syrupy—C.P.
Analysis: $V_2O_3Cl_4 \cdot 5H_2O$—approx. 82.00%

They are Uniform, Economical and of High Purity

Producers of alloys, metals and chemicals

VANADIUM CORPORATION OF AMERICA
420 Lexington Ave., New York 17, N. Y.
Chicago • Cleveland • Detroit • Pittsburgh

Xylenol, cryst., 45°-47°C., m.p., dms., l.c.l., works	lb.	.23	- —
56°-58°C., m.p., dms., l.c.l., works, frt. equald	lb.	.33	- —
Xylenol, cryst., 60°-62°C., m.p., dms., l.c.l., same basis.	lb.	.40	- —
Xylenol fraction, b.r. 7°-9° C., dry above 227° C., dms., c.l., same basis	gal.	1.25	- —
dms., l.c.l., same basis	gal.	1.30	- —
tanks, same basis	gal.	1.05	- —
b.r. 7°-9° C., dry at or below 227° C., dms., c.l., same basis.	gal.	1.35	- —
Xylenol fraction, b.r. 7°-9° C., dry at or below 227° C., dms., l.c.l., same basis	gal.	1.40	- —
2,4-Xylidine, tech., dms., frt. alld.	lb.	1.15	- —
2,5-Xylliline, tech., dms., frt. alld.	lb.	1.20	- —
Xylidines, mixed, o-m-p, dms., c.l., or t.l., works	lb.	.39	- —
dms., l.c.l., same basis	lb.	.40	- —
tanks, same basis	lb.	.33	- —

XYLOL

Xylol quotations, both coaltar and petroleum, may be found under Xylene.

Y

Yara yara oil, cns.	lb.	2.15	- 3.05
Yeast, brewers, debittered, USP, Saccbomyces, dlvd	lb.	.27	- —
dry, USP, 50 Int'l B units per gram, 100-lb. dms	lb.	.47	- —
USP, 90 Int'l B units per gram, 100-lb. dms	lb.	.52	- —
USP, 200 Int'l B units per gram, 100-lb. dms	lb.	.56	- —
Yeast, brewers, debittered, USP, 300 Int'l B units per gram, 100-lb. dms	lb.	.60	- —
Torula, USP, dlvd.	lb.	.18	- —

YELLOW PIGMENTS

Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow.

Yerba santa leaves, bls.	lb.	.40	- .45
Ylang-ylang oil, Bourbon, bots.	lb.	7.00	-22.00
extra, bots.	lb.	24.00	-33.00
extra, bots.	lb.	24.00	-33.00
Yohimbine hydrochloride, bots., tins.	oz.	3.75	- 4.25

Z

Zein, bgs., 36,000-lb. lots or more, bgs., 500-lb. lots or more, dlvd	lb.	.343	- —
bgs., smaller lots, dlvd	lb.	.373	- —
Zinc acetate, NF, VIII, dms	lb.	.53	- —
Tech., dms., l.t.l., works	lb.	.29¾	- —
Zinc borate, bgs., 1,000 lbs or more, works	lb.	.25	- —
bgs., less than 1,000 lbs., same basis	lb.	.27	- —
Zinc chloride, NF, gran., dms	lb.	.42	- —
NF, precip., powd., dms	lb.	.26	- —
Tech., soln., 50%, dms., c.l., works	100 lbs.	5.80	- —
dms., l.c.l., works	100 lbs.	6.40	- —
tanks, works	100 lbs.	5.15	- —
fused, dms., c.l., works	100 lbs.	10.70	- —
dms., l.c.l., works	100 lbs.	11.20	- —
gran., fib. dms., c.l., works.	100 lbs.	11.45	- —
fib. dms., l.c.l., works	100 lbs.	11.95	- —
Zinc chromate bbls., dlvd.	lb.	.29	- —
Basic bbls., dlvd.	lb.	.34	- —
Zinc cyanide dms. 1,000-lb. lots or more, works	lb.	.55	- —
dms., smaller lots, works	lb.	.57	- —
Zinc dust coml. bbls., c.l., works.	lb.	.17	- —
Pigment, bbls., c.l., works	lb.	.16½	- —
bbls., l.c.l., works	lb.	.18¼	- —
Zinc fluoride, bbls., works	lb.	.49	- .50
Zinc hydrosulfite, dms., c.l., frt. alld	lb.	.21½	- —
dms., l.c.l., frt. alld.	lb.	.23½	- —
Zinc metal prime western, slabs, E. St. Louis	lb	.13	- —
Prime western slabs, New York.	lb.	.13½	- —
Zinc naphthenate liq. 8% Zn., dms., frt. alld	lb.	.27	- —
10% Zn., dms., frt. alld.	lb.	.33	- —
Zinc nitrate tech. cryst., bbls., works	lb.	.20	- —
Zinc oxide, pigment, American process, lead-free bgs., c.l., frt. alld	lb	.14½	- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.15	- —
bgs., l.c.l., smaller lots, same basis	lb.	.15½	- —
leaded, 35% bgs, c.l., mills, frt. alld	lb.	.15⅜	- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.15⅞	- —
leaded 50% bgs., c.l., same basis	lb.	.15¾	- —
Zinc oxide pigment, American process, leaded, 50%, bgs., l.c.l., 10 tons or more, same basis	lb.	.16¼	- —
USP, gran., dms.	lb.	.26	- —
French process, green seal, bgs., c.l., mills, frt alld	lb.	.16¼	- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.16¾	- —
bgs., l.c.l, smaller lots, same basis	lb.	.17¼	- —
red seal, bgs., c.l., same basis.	lb.	.15¾	- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.16¼	- —
bgs., l.c.l, smaller lots, same basis	lb.	.16¾	- —
white seal, bgs., c.l., same basis	lb	.16¾	- —
bgs., l.c.l., 10 tons or more, same basis	lb	.17¼	- —
bgs., l.c.l., smaller lots, same basis	lb	.17¾	- —
Zinc oxide, USP dms., c.l., frt. alld.	lb.	.18¼	- —
dms., l.c.l., 10 tons or more, same basis	lb	.18¾	- —
dms., l.c.l., smaller lots, same basis	lb.	.19¼	- —
Zinc phenolsulfonate, NF, gran., dms	lb.	.45	- .48
NF, powd., dms.	lb.	.48	- .49
Zinc resinate, precip, 7.2-7.6% Zn., dms., frt. alld	lb.	.40¼	- —
Zinc silicofluoride, dms., works	lb.	.12½	- .14
Zinc stearate, tech., USP, cns., c.l.	lb.	.41	- —
cns., l.c.l.	lb.	.42	- .46
Zinc sulfate, powd., monohydrate, 36% Zn, bgs., c.l., dlvd.E.	100 lbs.	8.75	- —
bgs., l.c.l., dlvd. E.	100 lbs.	9.75	- —
Zinc sulfate in bbls 40c. higher.			
Zinc sulfide, pure, bgs., c.l., dlvd	lb.	.2530	- —
Zinc undecylenate, dms.	lb.	2.00	- —
Zinc, yellow (see Zinc chromate).			
Zinc-ammonium chloride, bgs., c.l., works	100 lbs.	10.25	- —
bbls., c.l., works	100 lbs.	10.85	- —
bbls., l.c.l., works	100 lbs.	11.35	- —
Zinc formaldehyde sulfoxylate, basic, 300-lb. dms., frt. alld	lb.	.26	- —
Normal, 250-lb. dms., frt. alld	lb.	.52	- —
Zircon (G) gran., bgs., c.l., works.	lb.	.03⅛	- —
bgs., 5 tons to c.l., works	lb.	.03⅜	- —
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04	- —
bgs., smaller lots, works	lb.	.06½	- —
Zircon (G), milled, bgs., c.l., works.	lb.	.04⅛	- —
bgs., 5 tons to c.l., works	lb.	.04⅜	- —
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04⅝	- —
bgs., 500-1,999-lb. lots, works	lb.	.07½	- —
Zircon (G) in barrels 1c. higher.			
Zirconium acetate soln., 13% ZrO_2, dms., c.l., 30,000 lbs. min., works	lb.	.23	- —
Zirconium hydride, powd., electronic grade, dms., works	lb.	14.00	-15.00
Zirconium oxide, CP., white, grd., bbls. or bgs., works	lb.	1.50	- —
Electric-fused lump, bgs., 500 to 1,999-lb. lots, works	lb.	.48½	- —
bgs., smaller lots, works	lb.	.51	- —
milled, bgs., c.l., works	lb.	.62	- —
bgs., 5-ton lots, works	lb.	.62½	- —
bgs., 1-ton to 9,999-lb. lots, works	lb.	.63½	- —
bgs., 500 to 1,999-lb. lots, works	lb.	.64	- —
bgs., smaller lots, works	lb.	.66	- —
Zirconium Oxide, Glass polishing grade, 94-97% ZrO_2, bgs., works	lb.	.55	- .65
Opacifier grade, 85-90% ZrO_2, bgs.,	lb.	.27	- .50
Stabilized oxide, 91% ZrO_2, milled, bgs	lb.	.62	- .85
Zirconium oxychloride, cryst., ctns., 5-ton lots, works	lb.	.37½	- —
bgs., l.c.l., smaller lots, same basis	lb.	.16⅝	- —

Charles Gitlan Clarifies Transfer of Sales Agency

Clarifying the story in the June 6th issue concerning the transfer of its US sales agency by Compagnie Metallurgique de la Campine FA of Brussels, Belgium, Charles Gitlan told OPD last week that the entire transaction was arranged by him with the consent of the Belgian smelter.

The new agent for Campine high-grade metallic antimony and white antimony oxide—as well as litharge, red lead and powdered metals—is Indussa Corporation of 511 Fifth Avenue, New York. The Belgian smelter had been represented exclusively in this country for the past thirty-five years by Charles Gitlan & Co.

Mr. Gitlan continues to handle the Belgian product line for Indussa.

Polystyrene Unit on Stream, Using Koppers' 'Dylite' Film

A new plant for production of "Arlite" expandable polystyrene film has been placed on stream at Chippewa Falls, Wis., by Applied Research & Development Corporation.

The film is being manufactured from "Dylite" polystyrene, a product of the plastics division of Koppers Company. Initial use of the film, through vacuum forming, will be for product applications in the packaging field.

CMRA, in Data Hassle, Joins the Tariff Forces

Chemical Market Research Association has lined itself up on the Tariff Commission's side in one of Washington's quieter bureaucratic hassles.

The board of directors of the association last fortnight voted unanimously in favor of having the commission retain authority to compile and publish data on synthetic organic chemicals.

The resolution said the association "is strongly opposed to recent government proposals to transfer the Tariff Commission's data gathering and publishing of organic chemical statistics functions to another agency."

Reasons cited for the CMRA stand are Tariff's long experience at the job, its staff of commodity experts and the fact that "the government proposes to transfer this function to another agency which is required by directive to drastically curtail the volume of listings."

VITAMIN D

FOR EVERY PHARMACEUTICAL AND FOOD USE

Approved for VITAMIN D upon periodic tests

Pure Crystalline D2 and D3.

Mineral Stable (D2 and D3 dry powders).

Water miscible dry powders in a milk carrier.

Wide range of potencies in oil carrier.

Economic intermediates in all potencies.

Our 20 years experience with vitamin D assures you of unequaled technical assistance.

WE MAINTAIN THE LARGEST INVENTORY IN THE UNITED STATES OF ASSAYED (U.S.P.) FINISHED STOCKS AVAILABLE FOR IMMEDIATE DELIVERY.

Product of **N.V. PHILIPS-DUPHAR,** the Netherlands

World's Largest Manufacturers of Vitamin D

OTHER BOWMAN PRODUCTS

YEAST

Hickory Smoked Yeast

Primary (Torulopsis utilis)

Powders—Flakes—Extracts—Concentrates—Hydrolysates

Vitab®

B-Complex Extract

Brewers' (Saccbromyces cerevisiae)

PURE VEGETABLE EXTRACT COLORS

Yellow—Red—Orange

ENZYMES

T.S. 3 for Greasetrap and Septic Tanks.

Bo-Zyme Silage Culture Concentrate

Bakers' Specialties

Digestive Pharmaceuticals

Chlorophyll

Phytol

Carotene

Xanthophyll

Anti-Oxidant (BHT)

Hydropoid

Distributed in the U.S.A. for Philips Roxane, Inc., by

CHARLES BOWMAN & CO.

220 East 42nd St., New York 17, N. Y.

BOWMAN FEED PRODUCTS, INC., Holland, Michigan

13160 Ortley Place, Van Nuys, Calif.

600 South Michigan, Chicago 5, Illinois

COLUMBIA-SOUTHERN®

CALCIUM CHLORIDE
REGULAR FLAKE
25 lb. and 100 lb. bags
ANHYDROUS FLAKE
80 lb. bags

COLUMBIA-SOUTHERN CHEMICAL CORPORATION
SUBSIDIARY OF PITTSBURGH PLATE GLASS COMPANY
ONE GATEWAY CENTER · PITTSBURGH 22 · PENNSYLVANIA

DISTRICT OFFICES: Boston • Charlotte • Chicago • Cincinnati Cleveland • Dallas • Houston Minneapolis • New Orleans New York • Philadelphia • Pittsburgh • St. Louis • San Francisco

CUPROUS CHLORIDE
HENRY BOWER CHEMICAL MFG. CO.
30TH AND GRAYS FERRY RD. PHILADELPHIA 46, PENNA.

From Boss-Man to Bum in Seven Short Years

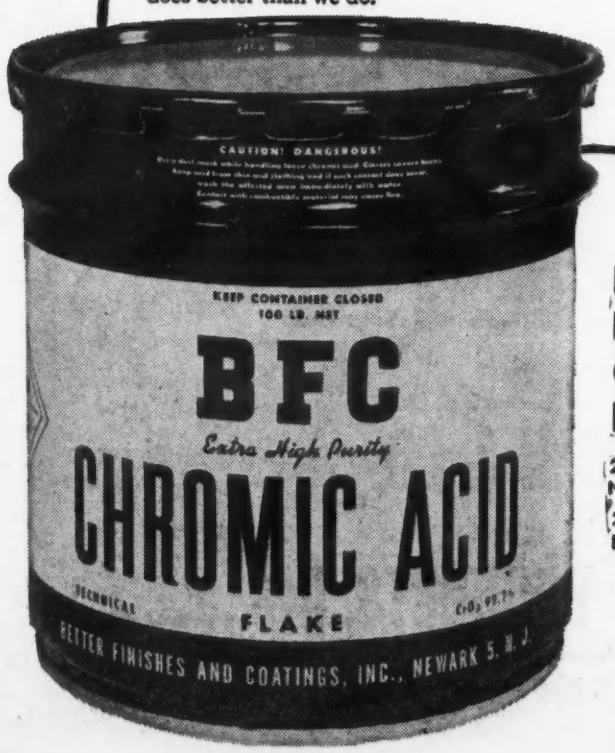
When we're tempted to save a buck by cancelling these ads, we remember what happened in Egypt when "a new king arose who knew not Joseph". It's still happening to forward planners who soft-pedal sales.

So for the benefit of newly appointed buyers:
Our extra-high-quality BFC Chromic Acid is 99.75+% pure and every batch is check-tested just to be double sure.

It's packed in tightly-sealed, shiny new cans filled on a scale so every one is full weight – and a few ounces extra.

We handle orders promptly and carefully like we appreciate them—which we do.

Modest orders from new customers are specially welcome cause that let's BFC Chromic Acid speak for itself. Which *it* does better than we do.



BFC PAINTS · PLASTICS · CHEMICALS

BETTER FINISHES & COATINGS, INC.
268 Doremus Avenue Newark 5, N. J.
2014 East 15th St. Los Angeles 21, Calif.

Heavy Chemicals

Doldrums in steel centers, where output may be observed unsteadily suspended at the 60-percent-of-capacity mark; fertilizer's seasonal quiescence, and the studied caution that now prevails in nearly all industrial outlets, combine to lower the lights in the heavy chemical theater of operations, rendering the incipient summer doldrums a premature reality, say sources close to the trade.

Backing up these reports of an early slowdown are figures from government agencies and industry citing slower production and shipments of key chemicals.

Last mid-week a producer reported that white ammonium chloride would be advanced 25 cents a hundredweight, effective on spot and contract July 1. As news circulated, another maker indicated that he would go along with it, and the general temper of comments that were encountered gave evidence that the move would be industrywide.

A price advance scheduled for caustic potash does not permit such unqualified certainty. While two producers have said they will boost the material forty cents a hundredweight on July 1, many remain still to be heard from. Several contacted by OPD last week said they were still studying the matter, one indicating a favorable disposition toward it, another keeping his own counsel. The market facts backing up a price boost would seem to be prodigious enough to impel it.

July 1 Price Advances
Ammonium chloride, 25c. per 100 lbs.
Potassium chloride, $2 per ton.

In contrast, the $2-a-ton July 1 advance in potassium chloride (industrial grade muriate of potash) has been concurred in by the major producers and appears destined to hit all books by July 1.

Steady in last week's metals markets were lead, mercury, silver, tin, zinc.

The American Paper and Pulp Association reported production for the week ended June 4, at 96.8 percent of theoretical capacity as compared with the revised figure of 97.3 percent for the previous week and 94.2 percent for the corresponding week of last year.

Acids

Hydrochloric—Industrial demand for chlorinated solvents, heretofore highly active, has begun to subside, though not as sharply as steel demand. This leaves the hydrochloric market in a position only slightly softer than that which it usually occupies at this time of incipient summer doldrums, sources in the trade say.

Hydrofluoric—At the risk of sounding monotonously repetitious, one notes that this market, unlike that for other acids, is stepping along at a breezy clip, wafted by active demand from aluminum makers.

Nitric—Doldrums of steel, quiesence of fertilizer making, and the studied caution that now prevails in some industrial outlets combine to ease nitric acid's sales pace, though fortunately there does not concur an embarrassment of overproduction, in the words of trade sources.

Sulfuric—American Iron & Steel Institute estimates last week's steel production at 1,775,000 tons, or 62.3 percent of capacity, which, if it turns out to be correct, would be a slight advance over the previous week's actual total of 1,726,000 tons, or 60.6 percent of capacity.

For perspective, the Institute cites last month's production of 2,102,000 tons, and production a year ago at a brisk 2,604,000 tons.

Bases and Salts

Ammonium Chloride—A producer announced in mid-week that white ammonium chloride would be advanced 25c. a hundred pounds, effective on spot and contract July 1. As news circulated, another maker indicated that he would go along with it.

New prices for carloads, f.o.b. works, freight equalized with nearest competitive points, are $6 per hundredweight for bags, and $6.50 for barrels.

The advance, says the company which initiated it, will cover accumulated costs of production incurred during the four-year interval since the price last advanced on October 1, 1956.

Caustic Potash—Two firms have posted an advance of 40c. a hundredweight for caustic potash, effective July 1, but many remain still to be heard from. Several contacted by OPD last week said they were still studying the matter, one indicating a favorable disposition toward it, another keeping his own counsel.

Factors favoring a price boost are impressive enough, disinterested observers concur. As the first advance since July 1, 1953, it would incorporate many, many cost increases in labor, freight, utilities. On top of it all, industrial grade muriate of potash, which is the basic raw material for caustic potash manufacture, is definitely slated to rise $2 a ton on July 1.

If there is any doubt at all that the advance will become industrywide, it would stem from the fact that the field is highly competitive because of the many producers and re-sellers who operate in it.

Caustic Soda—As the days grow hotter, sales start to cool with inventory cuts anticipating vacation time, sources in the trade report. There are no July 1 price changes on the books.

Chlorine—Price is reported steady at the advanced level that went into effect April 1. So-so is the word one trade source used to describe current business volume. Supplies were described as being in tune with the demand level.

Potassium Chloride—The refined grade (industrial grade muriate of potash) has been slated to rise $2 a ton on July 1. This will tab the 99.9 percent type at $29 a ton, and the 99.3 percent at $28, thus restoring prices to the levels obtained in 1956. The move appears destined to be industrywide.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	June 12, 1959
106.83	106.84*	106.87	104.84

* Revised.

For Current Prices see Page 10

Nonferrous Metals

Antimony—Domestic smelters produced 2,300 tons of primary antimony in the first quarter of 1960, reports the Mines Bureau. This was virtually unchanged from the previous quarter's output, but five percent higher than the average quarterly production in 1959.

Consumers' use of antimony, Mines notes, was two percent higher than the average quarterly consumption in 1959. Of the 3,400 tons consumed in the first quarter, 56 percent was used in metal alloys and 44 percent in non-metallic products.

Imports of 3,700 tons of primary antimony in the quarter were the highest in more than two years, Mines adds. Ore and concentrates, mostly from the Union of South Africa, Mexico and Bolivia, accounted for 52 percent of the total. Chief suppliers of antimony metal—36 percent of total imports—were Yugoslavia and the United Kingdom.

Oxide accounted for the remaining 12 percent of imports, the greater share coming from the United Kingdom.

No sulfide, Mines is careful to note, was imported during this period.

Almost 300 tons of ore, metal, and alloys were exported in the first quarter—more than in all of 1959, says Mines.

Consumers' and dealers' stocks of antimony have shown, says Mines, a downward trend since 1944 when inventories totaled 13,500 tons. On March 31, 1960, stocks were 6 percent under those of December 31, 1959. Most of the long-range decline, as well as the first quarter 1959 decrease was in ore concentrates and metal.

Chromium—Mines Bureau reports a ten percent rise in chromium consumption during 1959. Consumers took 1,337,000 short tons of chromite ores and concentrates during the year, containing about 395,000 tons of chromium, Mines reports.

Imports, the Bureau goes on to report, were 23 percent higher than in 1958. Industry stocks at year's end were equivalent to a 16-month supply based on the

Heavy Chemicals

1959 consumption rate, according to the government agency's report.

Prices quoted in the US for foreign chromium oxide content of 38.5 percent, ores and concentrates declined about 20 percent in the course of the year, it is noted.

Of total consumption, the chemical industry accounted for 162,000 tons of ore containing 50,000 tons of chromium in producing 119,000 tons of chemicals, sodium bichromate equivalent.

Except for small quantities produced in California and Washington, all domestic chromite output during 1959 was from a single mine in Montana, the Bureau notes. Shipments totaled 105,000 short tons of chromite concentrate with an average and a Cr/Fe ratio of 1.6:1.

Mercury—Price range was unchanged last week at $212 to $215 a flask for large lots. Sales continued slow.

Industrial consumption of murcury rose 11 percent in the first quarter to a total of 13,600 flasks from 12,200 in the last period of 1959, reports Mines Bureau.

Mine production in the same period dropped slightly to 7,010 flasks, thus reaching the lowest quarterly output in three years, Mines notes.

General imports of 2,186 flasks were 70 percent less than in the preceding quarter, the lowest since the third quarter of 1947. Exports totaled 167 flasks and re-exports 149 flasks, Mines adds.

In sum, as a result of the high consumption and lower domestic output and imports, stocks at consumers and dealers fell 12 percent and those at producers' plants to the smallest since the first quarter of 1955, the Mines report concludes.

Silver—Price remains unchanged at its long prevailing level of 91⅜c. a troy ounce, spot.

Tin—Market spun down a steady groove, the price of Straights metal unchanged at $1.01 a pound, spot, Friday.

Zinc—Shipments and production of zinc fell sharply in May, the American Zinc Institute reports.

Domestic shipments were down to 54,640 short tons from 64,251 the month before, and total shipments, including exports, declined to 62,039 tons from 71,926 tons the month before.

Production was reported at 79,216 tons, or 2,555 tons daily, as compared with 83,221 tons, or 2,774 tons daily, in April. Stocks closed the month at 165,038 tons, up cumbrously from 147,861 a month earlier.

Here's AZI's production breakdown for the month:

- Special high grade, 32,695 tons, as against 35,281 in April.
- High grade, 6,095 tons, as against 7,993.
- Intermediate, 749 tons, as against 547.
- Prime western (including select and brass special) 39,677 tons, as against 39,400 tons.

Look to BECCO first for

Ammonium Persulfate
Potassium Persulfate

as well as

- Hydrogen Peroxide
- Peracetic Acid
- Sodium Perborate
- and other Peroxygen Chemicals

Write for list of free technical bulletins.

BECCO Chemical Division
Food Machinery and Chemical Corporation
Station B, Buffalo 7, New York

KOH

Choose from two grades of caustic potash. REGULAR: Liquid 45% to 52%—Solid, flake, granular, crushed, broken, powder, walnut all 90%—Solid and flake 85%. LOW-CHLORIDE: Liquid 45%—Solid and flake 85%. Write for technical data sheets.

HOOKER CHEMICAL CORPORATION
806-2 FORTY-SEVENTH STREET, NIAGARA FALLS, NEW YORK
SALES OFFICES: BUFFALO CHICAGO DETROIT LOS ANGELES NEW YORK NIAGARA FALLS PHILADELPHIA TACOMA WORCESTER, MASS.
IN CANADA: HOOKER CHEMICALS LIMITED, NORTH VANCOUVER, B. C.

HOOKER CHEMICALS PLASTICS

LIME

of superior purity

MISSISSIPPI LIME COMPANY
Alton, Illinois

STEEL DRUMS

ALL SIZES and GAUGES

Send Us Your Inquiries

MANION STEEL BARREL COMPANY
OIL CITY, PENNSYLVANIA

INDUSTRIAL CHEMICALS

Phibro

for metals and plating

CADMIUM OXIDE • CADMIUM ANODES
SODIUM CYANIDE • CHROMIC ACID
ZINC CYANIDE • ZINC ANODES
DEGREASING TRICHLORETHYLENE
CARBON TETRACHLORIDE
POTASSIUM CYANIDE
COPPER CYANIDE
PERCHLORETHYLENE
NICKEL CARBONATE
NICKEL SULPHATE
NICKEL CHLORIDE
NICKEL ANODES
COBALT SULPHATE

PORTLAND, CONN.
PROVIDENCE 3, R. I.
PHILADELPHIA 6, PA.
CHICAGO 1, ILL.
BALTIMORE 1, MD.
BOSTON 10, MASS.

Philipp Brothers Chemicals, Inc.
COLISEUM TOWER BUILDING
10 COLUMBUS CIRCLE · NEW YORK 19, N. Y. · JU 6-6020
Cable Address: PHIBROCHEM, NEW YORK

If you use . . .

MISTRON®
MAGNESIUM SILICATES

And want . . .
Top quality, personalized service, fast delivery

It pays to call on . . .

BERKSHIRE CHEMICALS, Inc.

630 Third Ave., New York 17, N.Y. Telephone: YUkon 6-8855

SALES OFFICES: New York • Chicago • Philadelphia • Cleveland • Boston • San Francisco

Diamond Alkali Man Tells Of Corporate Image Hunt

An expanding and diversifying organization needs to update its "public image" to reflect its changing status. To Diamond Alkali Company, a crucial phase in this updating process was the selection of a new monogram.

Three main objectives were in mind during the three years Diamond hunted a new corporate symbol, according to William H. McConnell, vice-president of the Cleveland, Ohio company. The company aimed at:

- Distinguishing itself from its competitors.
- Suggesting the character, progressiveness and prestige of the enterprise.
- Permitting maximum retention of identification.

Mr. McConnell discussed Diamond's corporate image problem at last week's meeting of the Association of Industrial Advertisers in Washington, D. C.

Solvay & Cie. Producing Three Allyl Derivatives

Solvay & Cie. has just put on stream at Tavaux, France, a new unit for manufacture of allyl alcohol, allyl chloride and glycerol epichlorhydrin.

Production of these three products, all derivatives of propylene, is said to be the first step in a broad program for allyl derivatives, including a substantial glycerine facility which is slated to get underway during the second half of this year.

Solvay & Cie. produces a wide range of products at its Tavaux works, an industrial complex covering some two and a half acres and employing more than 2,000 workers.

Polypropylene May Tie

—Continued from page 3

propylene, and is reported to have a capacity of more than 20 million pounds right now.

The Wilmington firm is now supplying the polymer from its Parlin, N.J., polyolefins plant for Beaunit's pilot work. Hercules hopes to have the first of two 50-million-pound-a-year polypropylene units in operation at Lake Charles, La., by the time Beaunit is ready to produce.

Israel Rogosin, president of Beaunit, says his company plans to be turning out 12 million pounds of polypropylene fiber a year by early 1961. Machinery is to be installed at its Elizabethton, Tenn., plant, where Beaunit makes polyester, nylon and rayon fibers. (Beaunit makes its own nylon-6 from purchased caprolactam and also buys polyester resin and cellulose pulp.)

If the merger plans go through, it is expected that the deal would be accomplished by an exchange of four-tenths of a share of Hercules common for each share of Beaunit common outstanding.

Albert E. Forster, president of Hercules, while conceding that a tentative deal has been made for the stock swap, points out that the merger can still fall through. Says he: "Any number of factors could develop which might result in dropping the proposed combination."

An interesting sidelight to the proposed merger was pointed up last week. A union of the two companies puts another major chemical company heavily into the fiber field alongside of E. I. duPont de Nemours & Co. Fibers constitute 28 percent of duPont's volume, while right now they represent only 4 percent of the volume of Hercules.

If Hercules and Beaunit team up, however, Hercules' output of fibers would then move up to 29 percent of the company's total volume, outstripping duPont by 1 percent.

Mercury Metal
- *Prime Virgin*
- *Redistilled*
- *Reagent*

Mercurials
- *Calomel*
- *Corrosive Sublimate*
- *Red Oxide*
- *Yellow Oxide*
- *Organic Mercurials*

F. W. BERK & COMPANY, INC.
50 PARK PLACE EAST,
WOOD-RIDGE, NEW JERSEY:
WEBSTER 9-4600 (N. J.)
CHICKERING 4-7892 (N.Y.)

PASCO PASCO PASCO PASCO PASCO PASCO PASCO PASCO PASCO PASCO

Producers & Marketers of Crude Sulphur
. . . with mining operations in Jaltipan, Veracruz, Mexico, and principal offices in Houston.

Pan American
SULPHUR COMPANY
609 BANK OF THE SOUTHWEST BUILDING HOUSTON, TEXAS

FOR GAS . . . LIQUID . . . OR SOLID (DRY-ICE)

PURECO CO_2

AS CLOSE AS YOUR PHONE!

Over 100 Distribution Points To Serve You Promptly and Efficiently.
Pureco carbon dioxide is a versatile chemical with hundreds of applications in the chemical industries. Pureco is one of the world's largest manufacturers and maintains a nation-wide network of sales offices and distribution points.

Pureco Technical Service representatives are trained in the many uses of Pureco CO_2. They are ready to discuss and demonstrate the savings made possible by the use of Pureco carbon dioxide. Look in the Yellow Pages under "Carbonic Gas" or "DRY-ICE" for the PURECO representative nearest you . . .

PURE CARBONIC
Pure Carbonic Company, A Division of Air Reduction Company, Incorporated
General Offices: 150 East 42nd Street, New York 17, N.Y.
AT THE FRONTIERS OF PROGRESS YOU'LL FIND AN AIR REDUCTION PRODUCT

ALUM
CYANAMID
AMERICAN CYANAMID COMPANY
Process Chemicals Department
30 Rockefeller Plaza, New York 20, N. Y.

Petrochemicals Boom in the Southwest Is On

—Continued from page 7

noise to the resounding boom: Conventional inter-firm competition between producers of the same product, inter-product competition, inter-process competition.

"Inter-product competition is particularly intense in the field of synthetic fibers," the banker's publication reads, "while inter-process competition most frequently results from the ability of producers to make similar products out of a variety of alternative raw materials."

Acetylene, propylene and ethylene are foci of today's competition, but an inter-process market scramble exists at all levels of petrochemical manufacture, according to the bankers. For example, they note, some five major commercial methods of ethylene production are currently vieing for predominance.

In the words of the money lenders:

"Such intensely competitive conditions foreshadow a continued rapid rate of growth in the petrochemical industry."

Turning its attention to the petrochemical heartland where its heart lies (deep in the heart of you-know-where) the bank observes that investment in Gulf coast petrochemicals during the past decade has approached some $3 billion, lifting the overall total to $4 billion.

In 1958, the report goes on to note, the chemical and allied industries—which include petrochemicals—added $1,063 million to the value of chemical products manufactured in Texas, or about 21 percent of the value added by all major industrial production within the state.

In contrast, value added by chemical industries during 1954 was only $722 million.

Baton Rouge Booming

On the other side of the river, in Louisiana, the most rapid chemical development at the present time is taking place in the greater Baton Rouge area, where raw materials are readily available from the nation's largest gasoline refinery.

Although these feedstocks are somewhat more expensive in Louisiana than in Texas, lower transportation costs to most major northern markets have encouraged many large petrochemical producers to locate in the state.

Barges up the Mississippi, ocean freighters and tankers starting from as far up as Baton Rouge, carry the state's petrochemical wares far and wide.

In both states, economies of large-scale production are becoming increasingly important in production of petrochemical intermediates, *Business Review* finds. This means a steady and continuing rise in the average size of manufacturing units.

'Merchant' Plants Noted

A comparatively recent development—now a clear trend—is the construction of single large plants to produce "merchant" petrochemical intermediates, or basic chemical building blocks, the publication points out.

For example, several ethylene makers are producing in excess of their captive requirements in order to supply area users, and a few firms have constructed plants to manufacture ethylene solely for sale as petrochemical feedstock.

The publication estimates that already as much as one-third of the ethylene produced on the Gulf coast is sold rather than captively used.

Business Review promises a subsequent article which will tackle the petrochemical industry's growth prospects in greater detail, with particular reference to the outlook in its own back yard.

Look to BECCO first for

Peroxygen Chemicals

including
• Hydrogen Peroxide
• Peracetic Acid • Sodium Perborate
• Ammonium & Potassium Persulfates
• and other Peroxygen Chemicals

Write for list of free technical bulletins.

BECCO Chemical Division
Food Machinery and Chemical Corporation
Station B, Buffalo 7, New York

Stauffer CHEMICAL SINCE 1885

CARBON DISULFIDE

CARBON TETRACHLORIDE
CAUSTIC SODA
BORAX — BORIC ACID
PERCHLORETHYLENE
SULFURIC ACID
SULFURS
(All Grades)
SODIUM HYDROSULFIDE

•

STAUFFER CHEMICAL COMPANY
380 Madison Avenue, New York 17, N. Y.
636 California Street,
San Francisco 8, California
624 Wilshire Boulevard,
Los Angeles 17, California
Prudential Plaza, Chicago 1, Illinois
326 South Main Street, Akron 8, Ohio
Box 9716, Houston 15, Texas
North Portland, Oregon

DOW

MURIATIC ACID (HCl)

Call our nearest sales office or write:
THE DOW CHEMICAL COMPANY
MIDLAND, MICHIGAN

Manufacturers of
Red and Black **COPPER OXIDE**
COPPER SCALE
ROBERT A. COUPE, 260 Rhode Island Ave., PAWTUCKET, R. I.
Telephone PAwtucket 3-4144

TC TC

FERRIC SULFATE

An economical source of easily-dissolved ferric ion for manufacture of other iron compounds, and for coagulation.

For complete listing of our products see our inserts
in CHEMICAL WEEK BUYERS' GUIDE, Pages 173-176
or CHEMICAL MATERIALS CATALOG, Pages 551-554.

TC TENNESSEE CORPORATION

available today from Vitro

NICKEL

acetate • carbonate
chloride • formate
sulfate

warehouse, sales and technical service centers in principal cities

Vitro CHEMICAL COMPANY
GENERAL SALES OFFICE
342 MADISON AVENUE, NEW YORK 17, N.Y.
YUkon 6-2180

Producers of SULPHUR

Uniformly high purity of 99½% or better

TEXAS GULF SULPHUR CO. INC.

75 East 45th Street, New York 17, N. Y. — 811 Rusk Avenue, Houston 2, Texas

Sulphur Producing Units: Newgulf, Texas • Spindletop, Texas • Moss Bluff, Texas • Worland, Wyoming • Fannett, Texas

CLIP THIS AD TO LETTERHEAD FOR CATALOG OF SODIUM

PHOSPHATES and other Blockson Chemicals

BLOCKSON

BLOCKSON CHEMICAL COMPANY • Chemicals Division • Olin Mathieson Chemical Corporation • Joliet, Ill.

Salt Cake

F. H. Ross & Co.

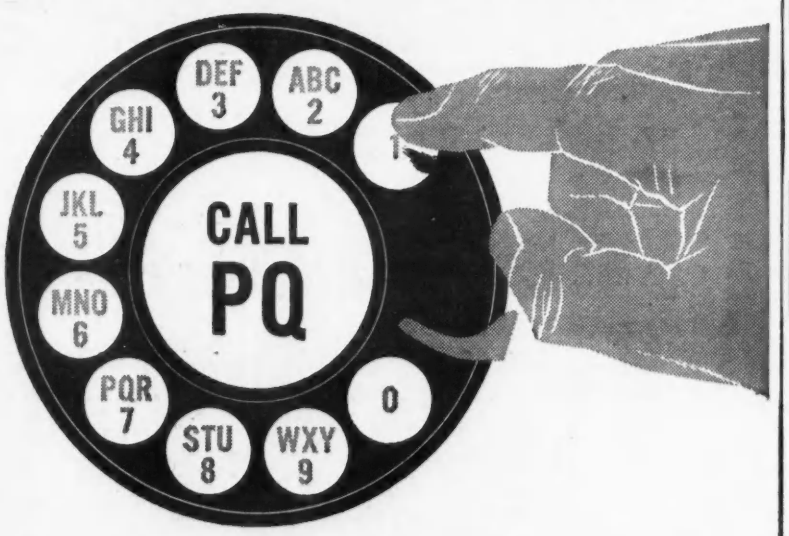
MUrray Hill 2-7136

155 E. 44th Street • New York 17, N. Y.

EXpress 2-2121

3930 Glenwood Drive • Charlotte, N. C.

FOR YOUR NEXT SILICATE DELIVERY...



For a sample, a trial shipment or regular supply, you can be sure when it's PQ.

PQ produces more than fifty liquid silicates (25 dry form). Nothing more complete anywhere.

PQ's deliveries from nine plants east of the Rockies (associates Phila. Quartz Co. of Calif.—Berkeley & Los Angeles, Calif.; Tacoma, Wash.; National Silicates Limited, Toronto and Valleyfield, Canada), or less truckloads from distributors' stocks in over 80 cities.

PQ know-how is available to help you from a century's experience in silicate manufacture and use.

For silicates, contact PQ Headquarters (telephone MArket 7-7200).

PHILADELPHIA QUARTZ COMPANY

1133 Public Ledger Building, Philadelphia 6, Pennsylvania

PQ SOLUBLE SILICATES

PQ PLANTS: ANDERSON, IND.; BALTIMORE, MD.; BUFFALO, N. Y.; CHESTER, PA.; JEFFERSONVILLE, IND.; KANSAS CITY, KAN.; RAHWAY, N. J.; ST. LOUIS, MO.; UTICA, ILL.

Jobs & People

Abbott Laboratories, North Chicago, Ill.—**Charles F. Griffin** has been appointed Minneapolis branch manager and will continue as district manager in that city.

Atlas Powder Company, Wilmington, Del.—**Charles C. Gammons,** a vice-president, has retired after twenty-six years of service with Atlas. He will continue as a member of the board of directors and the executive committee.

AviSun Corporation, Philadelphia, Pa.—**Joseph R. Layton,** manager of refinery accounting, has been advanced to the office of comptroller.

Chemstrand Corporation, New York—**Peter Bubela** has been elevated to manager of export sales.

Dewey & Almy Chemical Division of W. R. Grace & Co., Cambridge, Mass.—**Arnold Agulnick** has joined the company as development engineer in the polyfibron laboratory.

E. I. duPont de Nemours & Co., Wilmington, Del.—**E. Hearn Simpson** has been named western region-manager for the company's petroleum chemicals division, succeeding **Robert F. Harwick** who died last month.

Emery Industries, Inc., Cincinnati, Ohio—**Harry D. Armitage,** manager of the New York office, has retired after thirty-five years of sales there.

Food Machinery & Chemical Corporation, New York — **Foster Nostrand** has been named sales promotion manager of the "Dapon" department.

General Electric Company, Pittsfield, Mass.—**Richard J. Thompson** has been appointed manager of polycarbonate market development in the chemical materials department.

Hercules Powder Company, Wilmington, Del.—**Robert J. Keltz** has been named district manager of the chemical division's Philadelphia-Wynnewood sales office, serving the Middle Atlantic states.

International Minerals & Chemical Corporation, Skokie, Ill.—**Herbert S. Swan, jr.,** has joined the company as supervisor of chemical and industrial advertising and promotion.

Jefferson Chemical Company, Houston, Tex.—**Raymond Cappel** has been transferred to the New York regional office from Tulsa, Okla., to handle accounts in the Pennsylvania and New Jersey area.

Koppers Company, Pittsburgh, Pa.—**Harry E. Roche,** manager of the Port Arthur, Tex., plant of the plastics division, has retired after twenty-six years of service.

E. R. Squibb & Sons, a division of Olin Mathieson Chemical Corporation, New York—**Al M. Pawlina** has been named manager of the Boston, Mass., office, succeeding **Mike Bongiovanni,** who is transferring to the West Coast as manager of the California region.

Stauffer Chemical Company, New York—**Jack W. Kennedy,** formerly assistant sales manager in North Portland, Ore., has been appointed administrative assistant to the vice-president of sales in the western branch of the industrial chemicals division.

Penn-Drake®

WHITE OILS

PETROLATUMS

SOLVENTS

SULFONATES

penn drake products

PENNSYLVANIA REFINING COMPANY

BUTLER 39, PENNSYLVANIA

Branches: Cleveland, Ohio and Edgewater, N. J.

Representatives in all Principal Cities

Develop Anticorrosive and Detergent Properties in...

LUBRICANTS

HORSE HEAD ZINC OXIDES

...by New Jersey Zinc

The pioneer line—most used for over 100 years.

Complete Range of Types and Grades

SEND FOR TECHNICAL INFORMATION

SOME OF MANY OTHER USES:

Agriculture • catalysts ceramics • ferrites metallic soaps • paint pharmaceuticals • resins rubber • textiles

THE NEW JERSEY ZINC COMPANY

160 Front Street, New York 38, N. Y.

BOSTON • CHICAGO • CLEVELAND • OAKLAND • LOS ANGELES

Petroleum Derivatives

Aromatic solvent market conditions continue unvaried with the shortage of benzene the one consistent troubled factor. Estimates differ, of course, but late fall is expected to see supply approach the level of demand. Toluene demand for use in motor fuels is increasing while exports of this solvent are moving in higher volume. Aliphatic solvents remain quiet except in applications pertinent to the automobile industry. Predictions of profitable futures for some LPG's encourages that area of the market.

Ind cative of the petroleum industry's varied dilemmas is the wholesale price index (1947-49 equals 100) for crude petroleum and petroleum products which was, according to the Bureau of Labor Statistics, 115.0 for March and 114.6 for February, compared to figures of 119.9, 119.5 for the same months last year.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	June 12, 1959
104.34	104.34	104.34	104.42

For Current Prices see Page 10

Aromatic Solvents

Benzene—Tight supply is still in evidence. Snugness in the domestic market has not increased but continues at about the same pace with no high spot prices being reported.

Benzene from petroleum producers now accounts for about half of all supplies. Cokeoven sources and tar distillers supply the rest. One petroleum producer opines that despite reduction in crude runs, benzene from petroleum sources will climb well above the fifty percent figure within a year. Decline in volume from cokeovens rather than an increase from petroleum sources will be the cause. Eventually, of course, changeover in the steel industry to air reduction furnaces will result in vastly reduced coke production and accompanying by-products. Although some of these units are presently in operation it will be some years before their full effect is felt.

World demand continues strong. Foreign buyers are described as extremely active in attempts to corner material and are paying in the vicinity of 40c. a gallon when supplies are available. One petroleum spokesman remarks that supplies of domestic benzene were recently diverted to associated companies overseas to prevent complete shutdowns of their chemical plants.

Import figures made available last week covering April show no benzene shipments arriving in that month in the U.S. Reports from the Gulf area last week, however, reveal another delivery of Russian benzene totaling 4,500,000 gallons.

Toluene—Currently this solvent continues to be run into gasoline as seasonal motorist demand increases. The next four years is expected to see auto and truck registrations rise to 82 million and annual demand for toluene for motor gasoline double to a total of 100 million gallons.

Exports continue to move well providing ready outlets for producers. This is another area in which growth is expected.

Present domestic prices remain unchanged at 25c. a gallon, delivered East of the Rockies in tankcars.

Toluene imports in April totaled 759,729 lbs., all originating in Canada.

Xylene—Imports of this solvent in April totaled 948,268 lbs. 947,496 lbs. originated in Canada and 772 lbs. in Switzerland.

Aliphatic Solvents

Rubber Solvent—Comment from one producer-distributor indicates this steady product continues steady with no change in supply, demand or price. Currently New York and New Jersey price is 19c. a gallon, Group 3, 13875c. and Houston, 155c.

VM&P Naphtha—Constant demand and adequate supply is featured by this product. One producer foresees no alteration in the present situation.

Price in New Jersey and New York via tankcar is 19c. a gallon.

For sake of comparison, reference to OPD, June 16, 1930 reveals VM&P selling for 18c. a gallon, only a cent below the current level.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended May 28, totaled 259,655,000 barrels according to data reported by the Bureau of Mines. Compared with the total of 260,513,000 barrels the preceding week, this represents a decrease of 858,000 barrels comprising a decrease of 309,000 barrels in stocks of domestic crude and a decrease of 549,000 barrels in stock of foreign crude.

LPG's

One major producer predicts a bright and growing future for two gasses—pentane and ethylene. Use of pentane in the field of polymerization accounts for its growing demand.

Ethylene prior to the war reflected increased demand for ethylene glycol and synthetic ethyl alcohol. Advent of commercial styrene and the rise of polyethylene plastic industry zoomed ethylene near to top demand in the petrochemical industry.

It is reported that more and more potential consumers are approaching producers with the aim in view of linking up to transmission lines. The limitations of the transmission pipe lines appear to be the only factor able to hinder the phenominal growth of ethylene.

Bureau of Mines report for March indicates ethane-ethylene production was 22 percent above March of last year. Average daily demand in March for liquefied gases and ethane for fuel and chemical uses was 32,000,000 gallons, 40 percent above last year.

Butane—Production during the period May 1-15 totaled 85,842,000 gallons. This figure represents a decrease of 4,358,000 gallons from production in the same period last year.

Stocks as of May 15 were 269,387,000 gallons compared to 212,059,000 gallons on the same date last year.

Butane-Propane Mix — 27,012,000 gallons were produced during the first two weeks of May. During the same fortnight last year 29,660,000 gallons were reported.

Stocks as of May 15 totaled 20,845,000 gallons, a decrease of 870,000 gallons from inventory listed last year on the same date.

Statistics are from the American Petroleum Institute.

Waxes

Petroleum-derived waxes present a stable marketing picture. Demand is consistent and supply is abundant.

World consumption is presently estimated at about a million tons of paraffin and microcrystalline waxes annually. Paper and food packaging accounts for 600,000 tons while candle makers use 200,000 tons, chiefly in those areas of the world where electrical facilities are lacking.

The US leads in production with 600,000 tons accredited to it. European production is 100,000 tons, limited to W. Germany, UK, France and Italy, but output on the continent is not equal to demand and imports are required to meet needs.

Latest report from Bureau of Mines reveals the following facts concerning petroleum-derived waxes: (Each barrel equals 280 lbs.)

March production was 511,000 barrels, an increase from the 479,000 barrels recorded in the same month last year. Imports for March was 2,000 barrels, up a thousand from last year. Exports in March were 105,000 barrels as against 110,000 barrels in the same month last year.

Recorded stocks in March was 782,000 barrels, a decrease from the 799,000 barrels recorded during the same month in '59. Domestic demand was 425,000 barrels, up 65,000 barrels from last year.

Microcrystalline—Strong demand for both coating and laminating grades continues. Supply is ample with no prospect of change. Coating grades are 10c. to 11c. a pound in tankcars at works, while laminating grades on the same basis are priced 1c. higher.

looking for WAX FACTS ?

Maybe you're looking for an existing wax to meet your present needs . . . maybe it's just a question of blending in order to obtain proper product characteristics . . . or perhaps you need a brand-new wax for a new or special use.

call BARECO !

Whatever it is, Bareco offers you one of the nation's most extensive lines of regular and special-purpose micro-crystalline waxes, plus a full-time staff of wax experts to help you solve all kinds of wax problems.

So, if you want the *latest and most complete wax facts* on existing products, or need technical assistance in new areas of wax application, just write or call . . .

AP-60-1

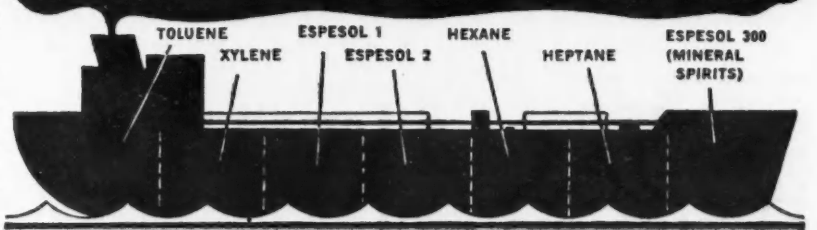
PETROLITE CORPORATION

BARECO WAX Company DIVISION

DISTRICT SALES OFFICES:
NEW YORK—150 East 42nd Street
CHICAGO—332 So. Michigan Ave.
ARDMORE, PA.—119 Coulter Ave.

SALES AGENTS:
GILBREATH CHEMICAL CO.
363 Brannan Street, San Francisco
GILBREATH CHEMICAL CO.
P.O. Box 549, Santa Monica, Calif.
ATLANTIC CHEMICAL & EQUIPMENT CO.
874 Ashby, N.W., Atlanta, Ga.

MORE PROFITS FOR YOU
When You Buy ALL your SOLVENTS
at ONE PLACE at ONE TIME!



SAVE!
BUY in COMPARTMENT LOTS!

ESPESOL SOLVENTS

ALIPHATICS • INTERMEDIATES • AROMATICS
IN COMPARTMENT LOTS
Immediately Available by TANK CAR • TRANSPORT TRUCK • SHIP TANK • BARGE

ESPESOL PRODUCTS

SIGNAL OIL AND GAS COMPANY
HOUSTON DIVISION

U. S. Terminals:
Houston, Texas — Chicago, Illinois — East Liverpool, Ohio
Madison, Indiana — Brownsville, Texas — Savannah, Georgia
Carteret, New Jersey — Los Angeles, California — Richmond, California
European Terminals:
Dordrecht (Rotterdam) Netherlands • Livorno (Leghorn), Italy

Post Office Box 2396—Houston 19, Texas—Phone Walnut 3-1681
New York Office: 10 Rockefeller Plaza, New York. Phone Circle 7-2530
Chicago Office: 1515 N. Harlem, Chicago, Illinois. Phone Village 8-5410
Cleveland Office: 25800 Center Ridge Rd., Cleveland, Ohio. Phone Edison 3-0180
Louisville Office: 4th and Broadway St., Louisville, Ky. Phone Jimpie 3-7634
Atlanta Office: 3121 Maple Drive, N.E., Phone Cedar 3-3237
Los Angeles Office: 110 S. Euclid, Pasadena, Phone Murray 1-0078

P.C.A.
The SALT of the EARTH
RED MURIATE

Producers of
Agricultural and Chemical Grade
MURIATE OF POTASH

POTASH COMPANY OF AMERICA
Carlsbad, New Mexico
General Sales Office... 1625 Eye Street, N. W., Washington, D. C.
Midwestern Sales Office... First National Bank Bldg., Peoria, Ill.
Southern Sales Office... Candler Building, Atlanta, Ga.

CALL FOR
DUVAL
For the finest service and quality!
• MURIATE OF POTASH
• SULPHUR
Produced by
DUVAL SULPHUR & POTASH CO.
EXCLUSIVE SALES AGENT
ASHCRAFT-WILKINSON COMPANY
ATLANTA, GEORGIA

DDT
CUSTOM GRINDING
LEBANON CHEMICAL CO.
P. O. 532, LEBANON, PENNA.

NICOTINE SULFATE
•
NICOTINE ALKALOID
CONRAY PRODUCTS CO. INC.
129A Pearl Street New York 5, N. Y.
Phone: HAnover 2-6971

OPD REPRINTS
35¢ A COPY
BHC
DDT
OIL, PAINT AND DRUG REPORTER
Reprint Department
30 Church Street, New York 7, N. Y.

OPD
Quickest way to keep current
on
Chemical Costs

Muriate of Potash—chemical grade
(Potassium Chloride)
Borax and Boric Acid
(all grades)
Quick deliveries from local areas in the East and Mid-West
JOSEPH TURNER & CO.
Ridgefield, New Jersey
83 Exchange Place
Providence, R. I.
435 N. Michigan Avenue
Chicago 11, Ill.

Agricultural Chemicals

With the close of the direct application period of the fertilizer season, trade men are looking toward the side and top dressing periods for increased demand in fertilizer materials. Due to the unusually wet weather over much of the country, farmers were prevented from applying fertilizers directly on a large scale. It is hoped that farmers will revive fertilizer demand with extensive applications during this secondary period of the fertilizer season.

Sales of cokeoven ammonia liquor during April are reported by the Bureau of Mines to have increased 60.5 percent over that estimated for March. The total sales for April was not equal to the sales for the same month last year. The sales for April of this year is almost 180,000 pounds less than that reported for April, 1959.

In another price announcement, a leading fertilizer producer will advance triple superphosphate listings for all grades. The new schedule calls for advances of 2 cents per unit and increases of 92 cents to $2.90 per ton. Prices are effective July 1, through June 30, 1961. (For details see below).

In move to counter rising fertilizer prices, one large fertilizer producer announced that he will hold the line on superphosphate prices for the coming fiscal year.

July 1 Price Advances
Triple superphosphate, 92c. to $2.90 per ton.
Potash muriate, 3c. to 3½c. per unit K_2O.
Potash sulfate, 50c. to 60c. per ton.
Phosphate rock, 50c. per ton.

Feed sales are reported to be a very routine. Quotations for fishmeal and scrap continue their lower listings. Market conditions in the poultry feed trade is considered to off its seasonal levels.

The problem of drift in the aerial application of agricultural chemicals may have at last been licked. The solution: A specially designed nozzle which produces an invert emulsion of water in oil-herbicide. Details of the nozzle and spray composition are secret. But the developer claims that in a recent demonstration, the new herbicide drifted only 40 ft. when it was applied in a 20 mile-per-hour wind. A helicopter did the job, flying at 30 ft. or 20 ft. above the normal altitude.

A leading chemical producer has begun construction on a 50 percent expansion of its manufacturing plant for parathion and methyl parathion, two broad-spectrum insecticides widely used in cotton, citrus fruit, deciduous fruit, forage and vegetable production.

The expansion, scheduled to be completed in November of this year, will give the plant an annual production capacity of 18 million pounds of these products. As part of the expansion project, the firm is also installing a preliminary activated sludge waste treatment plant.

Another listing for anhydrous ammonia was announced last week. The listing calls for $84 per net ton, effective August 1 through September 30. From October 1, 1960 through July 1, 1961, the price will be $92 per ton. These prices are the same as those announced by one other producer a few weeks ago.

Included in announcement are price schedules for ammonium nitrate, and nitrogen solutions. For the ammonium nitrate, packed in 80 lb. bags, the listings will be: $64 per ton effective August 1, through Sept. 30. From Oct. 1 through Dec. 31, the price will be $67 per ton, and January 1, 1961, through July 1, $70 per ton.

For manufacturing type nitrogen solutions (prices per net ton of 2,000 pounds contained nitrogen) the listing is as follows: $125 effective July 1 through Dec. 31, and $132 per ton on Jan. 1, 1961 through June 30. For the direct application type, the listing is: $160 in July; $158 effective August 1, through Sept. 30, and $164 on October 1, through July 1, 1961. All prices all on an F.O.B. basis, producers plant.

Ammonia—Supplies of ammonia are reported to be adequate, indicating a loosening in supplies over the past few weeks.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	June 12, 1959
109.97	109.97	109.97	112.02

For Current Prices see page 10

This marks the end of the direct application period of the fertilizer season and a decrease in demand.

Ammonium Sulfate—Cokeoven production of ammonium sulfate is reported by the Bureau of Mines to have been 127,857,725 pounds. During the previous month, production was reported to have been 139,461,712 pounds. This represents an 8.3 percent decrease in production.

Animal Proteins—Quotations for fishmeal and scrap continued at their lower listings of $100 per ton for meal and $96 per ton for scrap, on both Atlantic and Gulf coasts. Market conditions are said to be very quiet with demand from the poultry and feed market reported to be off from normal rates.

The fishing season in the Gulf area is reported to be producing somewhat spotty results. Fishing off the Atalantic coasts is reported to be just getting under way, and as yet no trend has been established.

Potash—The development of the Esterhazy, Saskatchewan potash site is reported to be proceeding on schedule despite some formidable engineering problems. The water seepage that halted the mine shaft sinking at the 1,200 ft. level in 1958, seems to have been licked.

The shaft was sunk by conventional methods to the 1,200 ft. Blairmore level. Then, refrigerent was pumped continuously through a series of holes surrounding the shaft. The solution enters the holes at minus 30 degrees F. and returns at 20 above. The refrigerent freezes the water at the level through which the shaft will be sunk. This enables the engineers to sink the shaft without danger from water seepage. To form a water-tight seal, large circular lining segments are laid one after the other to build a continuous wall extending to lengths of about 300 ft. and weighing in the neighborhood of 3,000 tons. Once the wall segment are bolted together with a lead inner linning, the result is a water-tight seal. Then the ice is allowed to cool.

The method employed by the German engineering firm contracted by the US producing firm at a cost of about $750,000, is called tubbing and has been used extensively in European mining operations. But this marks the first time the method has been employed in North America.

Production of potash from the Esterhazy site is expected to be about 420,000 tons annually. The producing firm states that production can be increased well beyond its present goal. From its inception the plant is reported to have been designed to double or triple its initial production.

Triple Superphosphate — One fertilizer producer has announced a new price schedule for the 1960-61 fertilizer year. The new prices are: run-of-pile, f.o.b. Bonnie Fla., $1 per unit, apa. (The old price was 98 cents.) For run-of-pile, f.o.b. vessel, Tampa, Fla., $1.05 per unit, apa. (The old price was $1.) For coarse, f.o.b. Bonnie, Fla., $1 per unit, apa. (The old price was 98 cents) For coarse f.o.b. vessel, Tampa, Fla., $1.05 per unit, apa. (The old price was $1.03). For bulk, granular, f.o.b. Bonnie, Fla., $48 per net ton. (The old price was $47.08.) For bulk, granular, f.o.b. vessel, Tampa, Fla., $50.30 per net ton. (The old price was $48.92.) For bags, granular, f.o.b. Bonnie, Fla., $57.35 per net ton. (The old price was $52.25.)

Included in the announcement is a new listing for phosphatic fertilizer solutions. On a f.o.b. basis, Bonnie, Fla., the new price will be $1.39 per unit apa, as against the old price of $1.36. All prices for both the phosphatic fertilizer solutions and triple superphosphate becomes effective July 1.

Aliphatic Organics

Trade people frankly admit that business could be better. No one's really pessimistic although there is some concern about how June will go. So far, sales are slow, reportedly, and with expectations of a traditionally poor July and August, a three-month-long lull looks like a dangerous possibility. Actually, the dark clouds started to gather a while back. April sales fell below the March level, sources in diverse areas of the market say, and while a recovery was noted in May, March still remains the high point for the year to date.

A cheering note, and perhaps the more significant, is that one firm's sales of several large volume, market-barometer-type chemicals through May were appreciably higher than in the comparable period in 1959. Business hasn't lived up to projections, a spokesman for the firm says, but he feels that this reflects to a large extent the great surge of optimism that came in with the new year, the first of the heralded soaring sixties, that effected everyone's thinking about business prospects.

As the foregoing indicates, there will be few if any price advances coming up July 1. By presstime Friday, none had been reported and while a few days remain before the 15th, the traditional cutoff date for notifying customers of upcoming increases, it appears unlikely now that any action will be taken before next October when business revives. Despite the poor profit return on some items, it's generally considered wiser to concentrate on selling for the time being.

Imports of ethyl alcohol in April were 977,746 gallons, bringing the cumulative total for the first four months of the year to 9,812,825 gallons, according to a report just issued by the Census bureau.

Compared with March imports of 4,408,288 gallons, the April shipment represented a sizable dropoff. Trade people speculated that this was due to one of two things; First, less demand from US users; second, the limited quantities available abroad.

Butadiene—Consumption of S-type rubber in April totaled 75,849 long tons, compared with 81,065 tons in March, according to a recent report from the Commerce department.

The same source notes that production of S-type rubber in April was 97,963 tons and that stocks at month's end were 185,464 tons.

Drop in consumption of S-type rubber, a primary outlet for butadiene, was paralled by an overall decline in the rubber market. Total new rubber consumption in April was 132,284 long tons, versus 144,932 in March. Production was 120,895 long tons.

Consumption of butyl rubber in April was 5,492 long tons, down from 6,324 in March. Production was 7,958 tons, end-of-month stocks 14,021.

Dioxane—A major chemical firm, which previously made 1,4-dioxane solely for its own captive use, is now offering the chemical commercially in tankcars and 55-gallon drums, shipped from its Texas plant site.

1,4-Dioxane is used as a stabilizer for chlorinated solvents; as a solvent for various plastics, resins, and oils; and as a dyeing aid in textile processing.

May 1, prices were revised. Schedule set-up at that time lists tankcars at 29c. a pound; carloads or truckloads at 31½c.; and less carloads at 33c. delivered East. On western deliveries, prices are uniformly 2c. per pound higher.

Ethyl Alcohol—Imports of ethyl alcohol in April totaled 977,746 gallons, bringing the cumulative total for the first four months of the year to 9,812,825 gallons. The April shipment, which was valued at $205,326 and dutied at $73,330, went to Galveston, Tex., destination of the 4,408,288 gallons brought in the month previous.

Compared with statistics for the first three months of '60, the April figure represented a sizable dropoff. This could be due, as some people in the trade pointed out, to one of two things. First, less of a need for imported alcohol to supplement that available domestically; and, second, the limited quantities of alcohol available from the major exporting nations, Finland, Peru and Brazil.

The situation might be a little clearer when statistics for May are available. If imports continue to decline, it would seem likely that US requirements for imported alcohol are, in fact, tapering off.

Formaldehyde—Business is good, a trade source says, quickly adding that it could be better. By way of explanation he notes that the plywood market is sick. That it is.

According to recent reports, several major fir plywood producers and many smaller manufacturers in the Pacific Northwest are cutting production in an effort to prop up sagging plywood prices, and eventually bring output into line with demand. Some in the trade are even going a step further and closing down mills completely till the profit picture improves.

For the first three months of the year, output was six percent above orders, the Douglas Fir Plywood Association, spokesman for about 18 percent of the industry, reports. The Association also notes that first quarter production was 14 percent higher and orders 2 percent lower than the like quarter in 1959.

Prices on one type of fir plywood, widely used in home building, were recently dropped to a 12-year low of $60 a thousand square feet. And while most of the industry kept the price at $64, this tag was still $4 a thousand lower than early May and $21 a thousand below a year ago.

Glycerine—Cuba, while leveling all sorts of criticism at the US even to rewriting our part in their history, continues to find a market here for its crude glycerine.

April shipments from the bearded isle totaled 486,266 pounds and carried a value of $83,348 and a duty of $1,942. Only the quantity brought in from Indonesia was larger. This was 615,660 pounds.

Also shipping crude glycerine here in April were Thailand (134,796 pounds) and Columbia (110,230).

Molasses—Markets for feeding cane molasses were steady during the week ended June 7. Demand showed little change from the previous week's slow to moderate condition. A few areas did, however, report a slight improvement in buying interest, Agricultural Marketing Service said. Prices continued at established levels at both New Orleans and New York.

Cuban production of 1960-crop blackstrap from cane grindings amounted to 261.9 million gallons by April 30, compared to 246.8 million by this date last

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	June 12, 1959
132.19	132.19	132.19	130.49

For Current Prices see page 10

Aliphatics Foreign Trade: April

Imports of selected industrial aliphatic organics for the months of March and April, 1960, as reported by the Bureau of Census, were as follows:

		April	March
Acetic acid (over 65 percent)	lbs.	521,740	656,982
Acetic anhydride	lbs.	79,070	152,250
Amyl alcohol and fusel oil	lbs.	0	61,861
Chloroacetic acid (mono and tri)	lbs.	795,240	126,503
Formic acid	lbs.	155,865	319,810
Glycerine, crude	lbs.	1,346,952	2,087,526
Carbon tetrachloride	lbs.	256,160	418,858
Lactic acid (55 percent or more by weight)	lbs.	14,530	42,552
Perchloroethylene	lbs.	1,307,113	2,405,133
Trichloroethylene	lbs.	6,663,030	6,000,012
Vinyl acetate, unpolymerized	lbs.	4,400,326	4,595,960

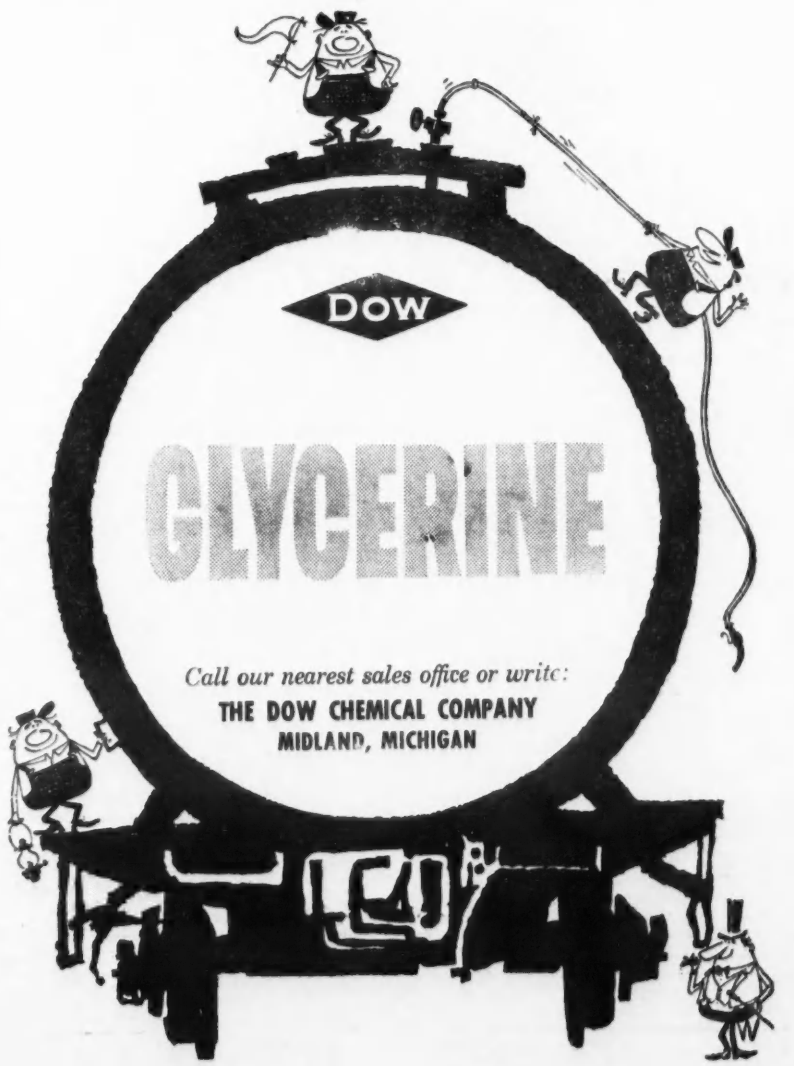
Only Procter & Gamble supplies GLYCERINE from 9 plants across America!

Producing a steadily increasing supply of natural GLYCERINE to fill your needs.

FOR INFORMATION WRITE:
Procter & Gamble, Cincinnati 1, Ohio
or 640 Fifth Avenue, N. Y. 19, N. Y.

LEVER BROTHERS COMPANY
Producers and Refiners of
NATURAL GLYCERINE
390 Park Avenue New York 22, N. Y.

RANEY CATALYST CO., INC.
Originators and Dependable Suppliers of
RANEY CATALYSTS
1322 Hamilton National Bank Bldg.
Chattanooga 2, Tenn.
Since 1925 Phone: Amherst 6-8616, Taylor 1-7823 Cable Address: RANI



Barbituric Acid

KAY-FRIES CHEMICALS, INC.

180 MADISON AVE.,
NEW YORK 16, N. Y.
MU 6-0661

PUBLICKER INDUSTRIES Inc.

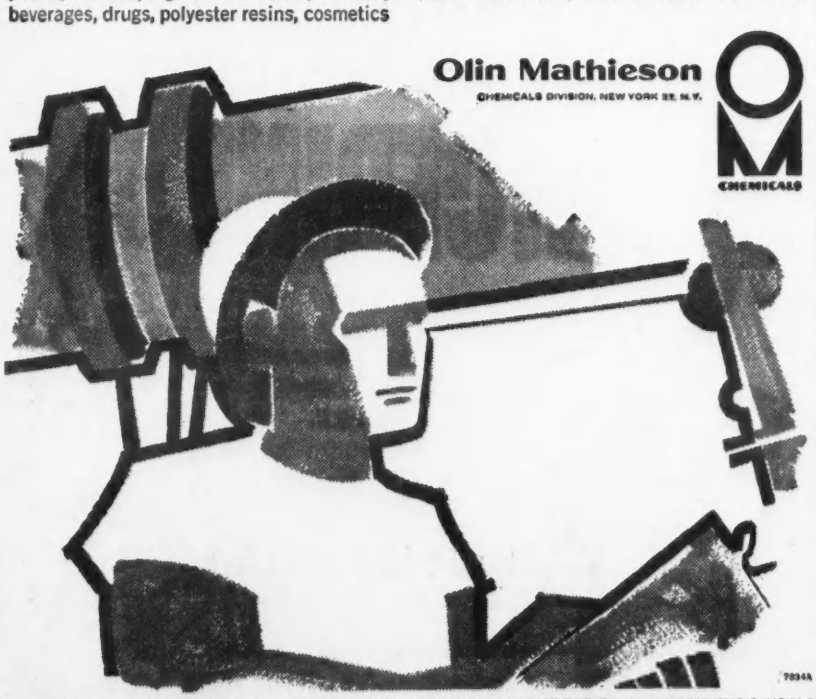
One of the world's largest producers of alcohol and solvents

1429 WALNUT STREET, PHILADELPHIA 2, PA. • LOcust 4-1400

a new source for...
propylene oxide • propylene glycol polypropylene glycols...

Olin Mathieson is now offering propylene products from extensive new facilities being completed at the Doe Run plant in Kentucky. Propylene Oxide—starting point for the manufacture of propylene glycol and other derivatives. Propylene Glycol—with proved applications in the manufacture of cellophane, for keeping tobacco moist, in food, beverages, drugs, polyester resins, cosmetics and plasticizers. Polypropylene Glycols—used to make foams for crash pads, for garments, refrigeration insulation and to strengthen construction between sheets of aluminum in air frames.

For complete information on the new Olin Mathieson propylene polyols or helpful technical assistance, write to Olin Mathieson.



ETHYLENE OXIDE • ETHYLENE GLYCOLS • POLYETHYLENE GLYCOLS • PROPYLENE OXIDE • PROPYLENE GLYCOLS
POLYPROPYLENE GLYCOLS • ETHANOLAMINES • GLYCOL ETHERS • SURFACTANTS • ETHYLENE DICHLORIDE

Aliphatic Organics

year. Molasses production per short ton of raw sugar averaged 43.7 gallons this season through April, as against an average of 45.5 gallons during the sale period in 1959.

Cuba's sugar cane grinding season is nearing a close, according to Agricultural Marketing Service. A total of 67 sugar cane grinding mills or more than a third of the 161 mills in Cuba have closed.

Sucrose—There has been no change in the price of refined, white sucrose since mid-March when the schedule was reduced 15c., to $9.20 per cwt., Eastern refinery. And, according to trade sources, no action is anticipated immediately.

Market for raw sugar is said to be somewhat depressed. Reflecting this, delivered prices for bulk sugar and sugar syrups which were due to expire May 31 have been extended through the current month.

Trichloroethylene—Recently, we said that March imports of trichloroethylene were huge. Now all we can say is that April imports were huger. Total quantity brought in here the later month was 6,803,030 pounds. Figure for March was 6,000,012.

East Germany dropped out of the roster of trichlor suppliers in April as did Japan. The rest of the list was intact, however. Once again, the United Kingdom was the major source (2,967,680 pounds), followed by Italy (2,115,440), Canada (659,150) France (587,155), Sweden (401,603), Netherlands (39,000), and West Germany (33,002).

Value of the entire quantity was $506,971. Duty was $37,999.

Color Additives

..*Continued from page 5*

cation & Welfare has thirty days in which to confirm or modify the proposed order.

In most respects, referral of scientific questions to the ad hoc committee follows the procedures set out in the pesticide law but with one important difference.

The color bill provides that any report, recommendations, underlying data, and reasons certified to the secretary by the ad hoc committee are to be made part of the record of any hearing. Also the advisory committee is to designate a member to appear and testify at such a hearing.

In addition to the ad hoc committee, the report on the bill also explained the purposes of other amendments which have been made to the bill.

The question whether pesticides that are capable of imparting color to fruits and vegetables should be included under the bill was settled by adopting the policy statement of HEW secretary Arthur Flemming that they are not intended to be included. Also the bill was amended to specifically exempt such products.

It was pointed out, however, that it is not the intention of the committee to exempt any chemical or nutrient if it also contains a dye, pigment or other substance whose function is to impart color to fruits and vegetables.

Other Amendments Cited

Another amendment has to do with methods of analysis for color additives and for determining the identity and quantity of such additives or their reaction in foods, drugs and cosmetics. The amendment allows the secretary to use discretion in deciding whether all analytical methods described in the bill must be listed in petitions for tolerances.

Another amendment makes the time table for acting on the petitions conform to that of the food additives law. Proposals made by a petition must be published in general terms by the secretary within ninety days or not more than 180 days.

A final amendment provides that if the secretary terminates a provisional listing of a color additive or applies new restrictions on its use, any person affected by the order shall have the right to file a petition to revoke or modify such action.

The filing of such a petition, however, will not operate to stay or suspend the secretary's order pending the review. Nor may the courts stay or suspend such orders of the secretary pending a judicial review.

SOCMA to Confer Medal On ACS Award Recipient

Synthetic Organic Chemical Manufacturers Association will make the first presentation of the SOCMA medal for creative research in organic chemistry at its next monthly meeting, tomorrow (June 14) at the Roosevelt hotel in New York.

The recipient, Dr. Herbert C. Brown, has already received the American Chemical Society's comparable award. Among his achievements are the co-discovery of a method for synthesis of boron hydride compounds, and discovery of a new approach to the chemistry of distorted molecules.

Dr. Brown, who is professor of chemistry at Purdue University, will give an acceptance address entitled "A Case History of Exploratory Research." In it he will trace highlights of his own research work, showing how various discoveries were made.

Dr. Brown will pinpoint "what he considers a key fault that often causes industry to lose major discoveries and developments in the course of research projects," according to SOCMA.

Western Market Men to Meet

Western Chemicals Market Research Group has called a meeting for this Thursday (June 16) at the Marines' Memorial Club in San Francisco. Featured speaker will be J. R. Willner of Oronite Chemical Company, discussing "Chemical Market Research in Local Geographic Areas."

ACRYLATE MONOMERS

Methyl Acrylate
Ethyl Acrylate
Butyl Acrylate
2-Ethylhexyl Acrylate

In addition, Rohm & Haas supplies Methyl Methacrylate plus seven other methacrylates, as well as Acrylic Acid and Methacrylic Acid.

For technical information, prices, and samples, write Department SP-27.

Chemicals for Industry
ROHM & HAAS COMPANY
WASHINGTON SQUARE
PHILADELPHIA 5, PA.

CHLORINATED SOLVENTS

Perchlorethylene • Methylene Chloride
Trichlorethylene • Carbon Tetrachloride

IMPORTED FROM WESTERN EUROPE • BULK STOCKS AT ELIZABETH, N. J.

INTERNATIONAL PETROSOLVENTS, INC.
155 East 44th St., New York 17, N. Y.
Tel: YU 6-6464

Maybe Eastman has a better method

Got a production problem? Does it involve the manufacture of a compound that's not generally available in the quantity or purity you require? Then consider this. We are equipped for and experienced in synthesis on a custom basis for quantities in the larger-than-laboratory-but-less-than-tankcar range. For information about this service, or a quotation, write *Distillation Products Industries,* Eastman Organic Chemicals Department, Rochester 3, N. Y.

DPi

DISTILLATION PRODUCTS INDUSTRIES
is a division of
EASTMAN KODAK COMPANY

Obituaries

John T. Gillespie, Sr.

John T. Gillespie, sr., chairman of the board of directors of Gillespie-Rogers-Pyatt Company, New York, died May 21. He was eighty-six years old.

Mr. Gillespie had been active with the firm since 1894, when he joined L. C. Gillespie & Sons, one of the two predecessor firms, which was merged with Rogers-Pyatt-Shellac Company in 1929 to form the present company.

L. C. Gillespie & Sons was founded in 1824 by Mr. Gillespie's grandfather, Charles Gillespie. Taking the company's helm now is John T. Gillespie, jr., son of the deceased.

Walter F. Silbersack

Walter F. Silbersack, president and a director of American Home Productions Corporation, died June 6 in Darien, Conn. He was fifty-eight years old.

Mr. Silbersack, president of the company since 1945, was general manager of A. S. Boyle Company when it was taken over by American Home Products in the early 1930's. He became a director in 1935, and executive vice-president in 1943.

Dr. Saul R. Buc, research fellow at General Aniline & Film Corporation, died June 5 in New York. He was forty-five years old.

Frank B. Champion, owner and president of Champion Oil & Gas Company, died June 6 in Houston, Tex.

Robert D. Noyes, plastics specialist with Union Carbide Corporation, New York, died May 31 in St. Louis, Mo. He was forty-seven years old.

George A. Savage, who retired in 1958 after twenty-five years as a vice-president of National Lead Company and manager of its Boston Branch, died June 6 in Braintree, Mass. He was fifty-eight years old.

Harold G. Pile, retired secretary of Fels & Co., Philadelphia, died recently in that city. He had been with the company fifty-six years.

Polish Chemical Output To Rise With West's Aid

The Polish chemical industry, with a vigorous boost from western nations, plans to boost production sharply this year. The chemical combine in Oswiecim is slated to hike output of its products by 80 percent over 1959 levels.

The scorecard reads this way, in metric tons: 20,000 tons of synthetic rubber; 14,000 tons polyvinyl chloride; at least 120,000 tons of calcium carbide; 11,000 tons acetic acid; 1,500 tons of polystyrene, and 500 tons butanol.

Butanol know-how for the Oswiecim works is being supplied by the French firm of Krebs & Cie., Paris, and the unit will start up next month.

The polystyrene plant built under the auspices of the British firm of Petrocarbon, Ltd., will also start producing in the near future.

The Polish Rocznik Statystyczny pegs organic chemicals output at these totals (in metric tons):

	1958	1957
Acetic acid	9,418	7,569
Methanol	17,891	15,094
Organic colors	8,754	7,525
Pesticides	29,400	23,600
Phenol	5,399	4,698
Tanning materials	3,092	4,129

A large phenol plant, not yet in production with its first stage of 18,000 tons a year, is getting a 13,000-ton-a-year addition in Bydgoszcz.

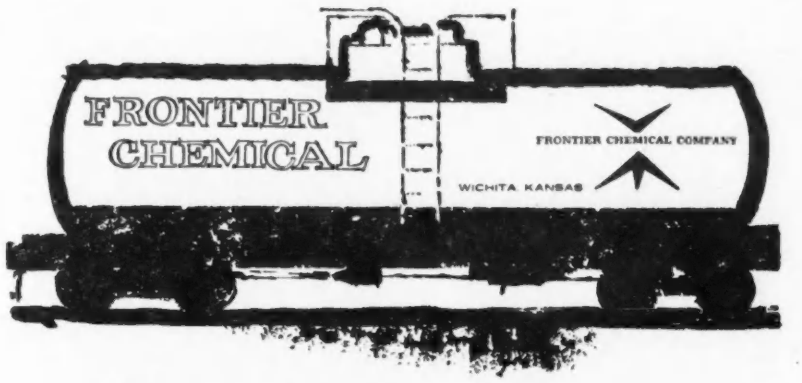
ORGANIC PEROXIDES

LUPERSOL® MMO CAPRYLYL PEROXIDE in Mineral Oil

FORM—*Liquid* PEROXIDE ASSAY—*50%*

USE—Catalyst for vinyl type monomers where mineral oil is the preferred diluent.

LUCIDOL DIVISION
WALLACE & TIERNAN INCORPORATED
1740 MILITARY ROAD, BUFFALO 5, NEW YORK



Methylene Chloride (TECHNICAL)

Modern equipment plus quality control brings you methylene chloride from Frontier for your use in paint strippers, aerosols, film manufacture, solvent extraction, or refrigerants. You will like our product and our friendly service. . . . Ask us about shipments in drums, tank trucks or tank cars.

SEBACIC ACID

HARCHEM 99% SEBACIC ACID BRINGS IMPROVED STABILITY TO ALKYDS—POLYESTERS—POLYAMIDES—PLASTICIZERS—SYNTHETIC LUBRICANTS THROUGH GREATER RESISTANCE TO HEAT—COLD—WEATHER—WATER AND CHEMICAL OR PHYSICAL ABUSE

WRITE FOR SAMPLE AND BULLETIN

THE KEY TO HARCHEM BETTER PLASTICS
HARCHEM DIVISION
WALLACE & TIERNAN, INC.
25 MAIN STREET, BELLEVILLE 9, NEW JERSEY
IN CANADA: W. C. HARDESTY CO. OF CANADA, LTD., TORONTO

INDUSTRIAL GLYCOLS

Wyandotte Glycols are playing important roles in many products and processes . . . *Ethylene Glycol* as plasticizer, solvent, or extractant . . . *Diethylene Glycol* as humectant, plasticizer, softener, or lubricant. Both have found wide use as chemical raw materials. Rigid specifications in their production assure purity and uniformity.

For more information, contact your Wyandotte representative, or write us direct.

Wyandotte CHEMICALS
MICHIGAN ALKALI DIVISION

Wyandotte Chemicals Corporation, Wyandotte, Michigan • *Offices in principal cities*

comes with your order for

TAR BASES FROM KOPPERS

Pyridine, picoline, lutidine, collidine, quinoline and 15-18 tar bases; all are available in quantity from Koppers in tank cars, trucks, or 55 gallon containers.

When you order tar bases from Koppers, you get the benefit of broad experience in use-technology, too. From work with users of these chemicals over many years, your Koppers Coal Chemicals Specialists can give you sound advice on processing techniques, purities and other characteristics that will save you time and money.

Backing up these knowledgeable field representatives is the Koppers Technical Department, probably the most experienced group in the industry on coal chemicals and their applications. All told, you'll be time and money ahead when you place your orders for tar bases with Koppers. For full information, write Koppers' Tar Products Division, Pittsburgh 19, Pa.

KOPPERS

KOPPERS
COAL CHEMICALS

Coal Chemicals

A number of dyestuff intermediates will be advanced on July 1. The materials are naphthalene-based and the increases reflect the higher cost of raw material which producers have had to absorb. Nevile and Winther's acid (1-naphthol-4-sulfonic acid) will advance 10 cents per pound, a-naphthol, sodium naphthionate and a-naphthylamine will each be raised 2 cents a pound, and naphthalene disulfonic acid, disodium salt, will advance 14 cents a pound. Two weeks ago a major naphthalene supplier reported a 1 cent advance would be made in crude and refined naphthalene prices on July 1.

A major producer will raise prices on fumeric acid and maleic anhydride, in drums, ½ cent per pound on July 1. Schedules for these materials in bags will remain unchanged. The bulk price on maleic anhydride will also remain unchanged. In other quarters the matter was under study and further developments are expected this week.

Two producers, who held to a 17 cent price on phthalic anhydride during the second quarter, will advance the price to 19 cents July 1. At least one firm announced increases in phthalate plasticizers (see Coatings Materials page 59).

Price of p-nitroaniline will advance 2 cents per pound across the board in another July 1 change. The para isomer is manufactured independently of ortho and meta isomers so that prices on the latter two will not be effected, sources report.

July 1 Price Advances

Fumaric acid, dms., ½c. per lb.*
Maleic anhydride, dms. ½c. per lb.*
a-Naphthol, 2c. per lb.
a-Naphthylamine, 2c. per lb.
Nevile and Winthers Acid, 10c. per lb.
p-Nitroaniline, 2c. per lb.
Sodium naphthionate, 2c. per lb.
Naphthalene, crude and refd., 1c. per lb.*
Phthalic anhydride, 2c. per lb.

* One producer.

Coke production in the United States during the month of April amounted to 5,760,669 net tons, according to report of the Bureau of Mines. The figure was almost 10 percent under the total for March and 8 percent below the April 1959 figure. Producers' stocks of oven coke increased for the first time since November 1959 and at the end of April were equal to 19.9 days production. Coking-coal stocks also increased slightly but days' supply climbed from 38.9 to 42.4 because of the lower consumption rate in April.

The American Iron and Steel Institute estimated that steel production in the week ended June 12 would amount to 62.3 percent of theoretical capacity equivalent to 1,775,000 net tons of steel. Output in the previous week was 1,726,000 tons, 2,102,000 in the comparable week one month ago, and 2,604,000 net tons in the corresponding week one year ago.

Basic Products

Benzene—Supply situation here remains unchanged from past weeks. One producer opines that present lagging steel production rate will cause tight supply to persist until late fall at least. Inventories are at minimum levels and not expected to rise significantly for the remainder of the year. Contract benzene has been subject to switches and curtailments preventing producers from forecasting needs other than on a thirty day basis.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	June 12, 1959
118.40	118.40	118.40	118.56

For Current Prices see page 10

Reports from the Gulf indicate another shipment of Russian benzene arrived last week, consisting of about 4.5 million gallons.

Bureau of Mines reported sales of nitration and industrial pure benzene from cokeovens amounted to 13,246,469 gallons in April as against 14,016,222 gallons in the previous month and 15,995,032 gallons in the corresponding month last year. Sales in the first four months of this year amounted to 53,707,161 gallons which compares with a four-month sales total last year of 54,224,251 gallons.

Stocks of nitration and industrial pure benzene on hand at the close of April amounted to 7,263,533 gallons as against 7,922,844 gallons at the beginning of the month and 9,030,232 gallons on hand at the close of April last year.

m,p-Cresol—Trade sources report the market is slow for m,p-cresol and xylenols. Prices are unchanged from last report. Export market has been sluggish.

Cresylic Acid—Market demand is sluggish. Tricresyl phosphate production in March amounted to 3,142,022 pounds as opposed to 2,616,407 pounds in the previous month.

Naphthalene—A major supplier is slated to advance naphthalene prices 1c. per pound across the board on July 1. The advance will do away with the price spread in naphthalene which has been in effect since April 1 when other producers reported a 1c. increase. Price on domestic crude 78 degree naphthalene will be 6c. per pound.

Supply outlook for June cannot improve, sources report. No one has been able to build any inventory. Supply forecast for July is a little better, but consumers will still be taking all they can get and asking for more.

Crude naphthalene imports from Canada during the month of April amounted to 1,279,000 pounds valued at $69,582, while imports from the United Kingdom were 1,296,720 pounds valued at $68,779. The Netherlands imports of naphthalene totaled 279,786 pounds with a value of $15,919 and Belgium imports were 216,051 pounds valued at $23,249 during April. Total for the month was 3,072,257 pounds valued at $177,529.

A number of naphthalene-based intermediates will be advanced July 1 on spot and contract. a-Naphthol, sodium naphthionate, a-naphthylamine and N-ethyl-a-naphthalene will be increased 2c. per pound. Naphthalene disulfonic acid, disodium salt, will advance 14c. per pound and Nevile and Winther's acid (1-naphthol-4-sulfonic acid) 10c. per pound.

Under new schedules prices on these products in drums will be as follows: a-naphthol, $1.02 per pound; a-naphthylamine, 52c. per pound; sodium naphthionate, 72c. per pound; N-ethyl-a-naphtha-

Cokeoven Output: April

The following statistics indicate production of selected coal chemicals as reported to the Bureau of Mines by cokeoven plant operators. Benzene statistics do not include motor benzol. All figures are reported in gallons.

	April 1960	First Four Months 1960	First Four Months 1959
Benzene, nitration	10,136,128	44,183,550	38,471,648
Industrial pure	3,605,038	15,199,811	14,607,260
Industrial 90 and other	157,610	764,117	532,416
Coaltar, crude	69,329,888	291,078,711	286,085,046
Chemical oil, crude	2,687,333	11,285,499	8,261,882
Solvent naphtha, crude and refined	556,858	1,906,508	1,675,123
Toluene, nitration	2,360,897	9,906,573	9,280,066
Industrial pure	564,818	2,212,064	2,408,385
Xylene, all grades	876,163	3,069,876	3,368,446

Coal Chemicals

lene, $1.04 per pound; naphthalene disulfonic acid, disodium salt, $1.20 per pound and Nevile and Winther's acid, $1.40 per pound.

Phenol—A producer announced plans for a new synthetic phenol unit in northern Kentucky. Completion of the plant is expected by the end of 1961. Trade sources estimate capacity of the unit will be upwards of 50 million pounds.

Tariff Commission indicated March production of molding materials from phenolic and other tar acid resins amounted to 22,146,677 pounds with sales of 18,189,140 pounds. The figures compare with production in the previous month of 20,429,113 pounds and sales of 16,776,239 pounds.

Pyridine—Supply outlook is poor. Prices in the resale market have been reported as high as $1 per pound as against tank-car quote of major producers of 65c. per pound.

Imports in the month of April totaled 9,447 pounds valued at $32,905, according to report of the Bureau of Census. A breakdown of imports during the month shows 1,068 pounds came from the United Kingdom, 1,479 pounds from Switzerland and 6,900 pounds from Russia.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ended June 12, was as follows:

Ammonia liquor	lbs.	561,754
Ammonium sulfate	lbs.	23,624,895
Benzene	gals.	2,278,226
Coaltar	gals.	12,452,223
Crude chemical oil	gals.	364,100
Solvent naphtha	gals.	72,820
Toluene	gals.	509,740
Xylene	gals.	145,640

Intermediates

Fumaric Acid—Effective July 1 a major producer will increase the price of fumaric acid in 250-lb. drums ½c. per pound across the board. In 50-lb. bags, the price schedule will be unchanged.

New prices in 250-lb. drums on a freight equalized basis will be as follows: carload or truckload, 23¼c. per pound; less carload or truckload, 24¾c. per pound.

In 50-lb. bags: carload or truckload, 22¾c. per pound; less carload or less truckload, 24¼c. per pound.

In other quarters the move was under study. A producer recently reported offering fumaric acid in 50-lb. bags at ½c. per pound under drum prices. From this source price on carload lots in drums was quoted last week at 22¾c. per lb.; l.c.l., 24¼c.; carload of bags, 22¼c. l.c.l., bags, 23¾c. per lb.

Maleic Anhydride—Effective July 1 a major producer will advance the price of maleic anhydride packed in 250-lb. drums by ½c. per pound. Prices on bulk lots and on material packed in 50-lb. bags will remain unchanged.

Under new schedules, prices on 250-lb. drum lots will be as follows: carload or truckload, 24c. per pound; less carload or less truckload, 25½c. per pound.

In 50-lb. bags: carload or truckload, 23½c. per pound; less carload or less truckload, 25c. per pound; in bulk, 22½c.

New process, new plant
gives you more quality, more quantity when you turn to
DU PONT ANILINE

A brand-new plant in Gibbstown, N. J., has been added to the existing facilities that have made Du Pont a leading producer of aniline since 1915.

This all-new-from-the-ground-up plant was created to provide abundant new supplies of 99.8% minimum purity aniline for a wide variety of uses in the rubber, pharmaceutical dyestuff, rocket-fuel, photographic and other industries.

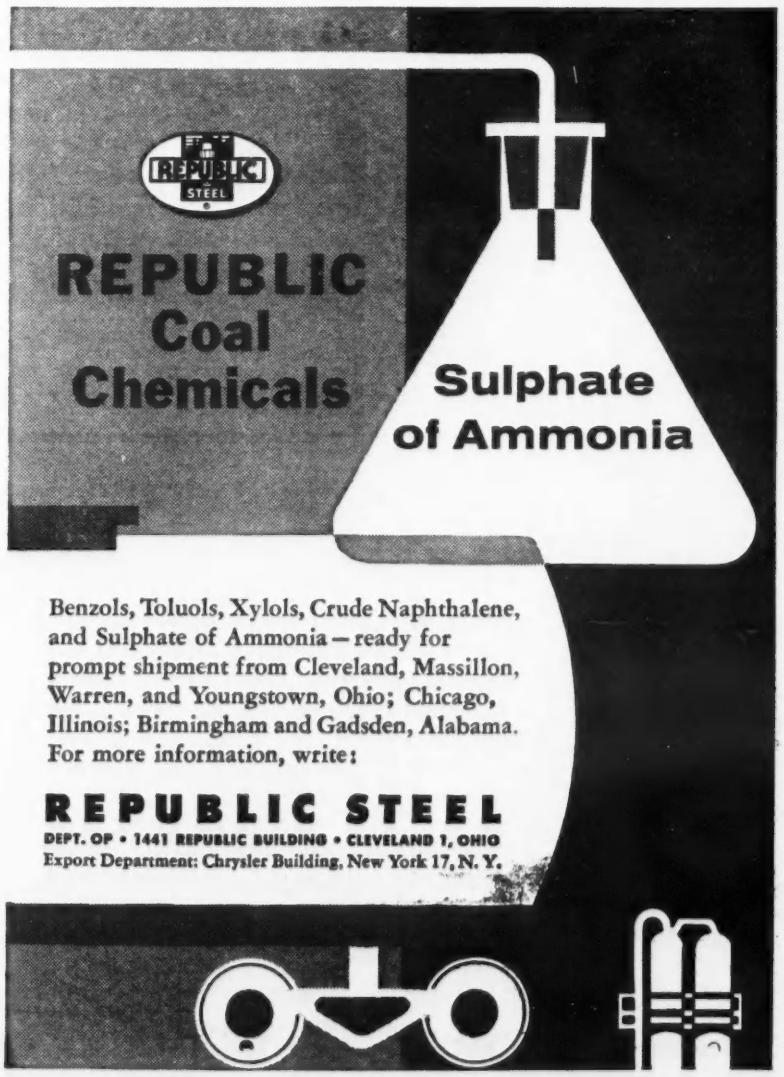
It incorporates a new Du Pont process which produces aniline of finer quality than was previously attainable . . . at no increase in price.

Du Pont aniline can be shipped in bulk or 450 lb. net steel drums. For more details, contact our nearest branch office, or write to E. I. du Pont de Nemours & Co. (Inc.), Explosives Dept., 6545 Nemours Building, Wilmington 98, Delaware.

DISTRICT OFFICES:
BOSTON: 140 Federal Street, Room 325, Boston 10, Mass. Phone: HAncock 6-1724 • CHARLOTTE: 427 West Fourth Street, Room 228, Charlotte 1, N. C. Phone: FRanklin 5-5561 • CHICAGO: 7250 North Cicero Avenue, Lincolnwood, Chicago 46, Ill. Phones: INdependence 3-7250, ORchard 5-1010 • CLEVELAND: 11900 Shaker Blvd., Cleveland 20, Ohio. Phone: LOngacre 1-5070 • HOUSTON: 3202 Weslayan Street, O'Meara Bldg., Houston, Texas. Phone: MOhawk 7-9197 • LOS ANGELES: 2930 East 44th Street, Los Angeles 58, Cal. Phone: LUdlow 2-6464 • NEW YORK: 350 Fifth Avenue, 1000 Empire State Bldg., New York 1, N. Y. Phone: LOngacre 3-6400.

DU PONT

Better Things for Better Living . . . *Through Chemistry*


REPUBLIC STEEL
REPUBLIC
Coal
Chemicals
Sulphate
of Ammonia
Benzols, Toluols, Xylols, Crude Naphthalene, and Sulphate of Ammonia—ready for prompt shipment from Cleveland, Massillon, Warren, and Youngstown, Ohio; Chicago, Illinois; Birmingham and Gadsden, Alabama. For more information, write:
REPUBLIC STEEL
DEPT. OP • 1441 REPUBLIC BUILDING • CLEVELAND 1, OHIO
Export Department: Chrysler Building, New York 17, N. Y.

Many rubber formulators are improving processibility . . . reducing viscosity and scorch-sensitivity . . . achieving better mold flow and release with 2 to 5 parts of "A-C" Polyethylene per hundred of rubber. They find that the slight added cost is more than offset by savings in labor costs and reduction of rejects. "A-C" Polyethylene also permits higher loadings than would otherwise be possible. Write for technical advice on applying "A-C" Polyethylene to your particular problem.

PLASTICS AND COAL CHEMICALS DIVISION
40 Rector Street, New York 6, N. Y.

Allied Chemical

Want assured distillation range?

Benzene • Toluene • Xylene • Phenol • Cresol • Cresylic Acid • Naphthalene • Creosote • Picoline Pyridine • Ammonium Sulfate • Ammonium Nitrate • Anhydrous Ammonia • Nitric Acid • Pitch

United States Steel Chemical sales offices in Pittsburgh, New York, Chicago, Salt Lake City and Fairfield, Alabama

USS Chemicals

TRADEMARK

WRITE FOR TECHNICAL DATA SHEETS

E. I. DU PONT DE NEMOURS & CO. (INC.) Wilmington 98, Del.

ATLANTA 3, GA. 1261 Spring St. N.W.

CHARLOTTE 2, N. C. 427 West Fourth St.

CHICAGO 3, ILL. 7 South Dearborn St.

PALO ALTO, CAL. 701 Welch Road

NEW YORK 13, N. Y. 40 Worth St.

PHILADELPHIA 3, PA. 1616 Walnut St.

PORTLAND, ORE. 1238 N.W. Glisan St.

RUMFORD 16, R. I. 50 North Broadway

DU PONT OF CANADA, LIMITED Montreal, Canada

NOW OVER 350 INTERMEDIATES

MANY IMMEDIATELY AVAILABLE

Including:

p-Nitrotoluene Tech. — p-Nitrobenzoic acid Tech.
2,4-Dinitrotoluene Tech. — p-Aminobenzoic acid Tech.
o-Toluidine Tech. — p-Toluidine Tech.

DUPONT **DYES AND CHEMICALS**

Better Things for Better Living . . . *through C* ...istry

Coal Chemicals

per pound. Prices are on a freight equalized basis.

p-Nitroaniline—A major producer announced that effective July 1, the price of p-nitroaniline will be advanced 2c. per pound across the board.

New schedules for the material will list carload and truckload lots at 44½c. per pound and less carload or truckload quantities at 46½c. per pound. Prices are on a freight allowed basis.

Phthalic Anhydride — Two producers slated a 2c. per pound advance in the price of phthalic anhydride for July 1. The advance will set prices at 19c. per pound for flake material in bags, carload, frt. equald.

Other major suppliers advanced prices to 19c. on April 1. A phthalate producer reported advances of about 1c. per pound on tankcar lots of the firm's phthalates.

Styrene Monomer — Department of Commerce reported consumption of new rubber amounted to 132,284 long tons in April as against 144,932 tons in the previous month and 121,335 tons in the comparable month last year.

Consumption of S-type synthetic rubber in April was 75,849 long tons, while use of butyl rubber amounted to 5,492 tons and neoprene consumption was 6,525 tons. Use of N-type synthetic rubber amounted to 2,386 long tons during the month.

Production of S-type in April was 97,963 long tons; butyl, 7,958 tons; neoprene, 11,879 and N-type, 3,095 long tons.

End of month stocks: S-type, 185,464 long tons; butyl, 14,021; neoprene, 13,796 tons and N-type, 8,230 long tons.

Italy Is Expanding

—Continued from page 7

spurred by both domestic and foreign demand, rose about 61 percent over the 1957 level of 14,893 tons, to an estimated 23,800 tons. Exports rose 45 percent to 10,760 tons from 6,200 in 1957, and went to the USSR, France and Canada.

Stimulated by demand from the plastics industry production of synthetic phenol increased 30 percent during 1958 to a total of 10,057 tons. But Italy continued as a substantial importer, taking 4,700 tons—which was about unchanged from 1957. Major suppliers were West Germany, 1,612 tons; and the US, 1,172 tons.

Stimulus in Plastics Branch

New processes for utilization of natural hydrocarbons provided and continue to provide a strong stimulus to expansion of the plastics branch, BDSA reports:

Output increased 23 percent in 1958 to 165,000 tons, up from 134,000 tons the year before. Domestic consumption rose 14 percent from 128,000 to 146,000 tons.

Production of nitrogenous fertilizers, BDSA goes on to note, increased sharply in 1958 to 467,000 tons—26.6 percent above 1957—but consumption rose only slightly, from 272,000 to 280,000 tons. In 1958, prices averaged 15 percent less than previous quotations, but the reduction, says BDSA, came too late to increase domestic consumption substantially.

And with start-up of new capacity output of nitrogenous materials is expected to rise even more spectacularly in the next few years. Estimated at 520,000 tons in 1957, capacity rose to 620,000 tons in 1958 and is expected to reach 750,000 to 800,000 tons by mid-1959, BDSA says.

Here's how other key chemicals performed in 1958, according to the BDSA report:

NITRIC ACID—Production increased 7 percent from 825,836 tons to 883,742, reversing a declining trend. Accounting for the increase was a busier fertilizer market, which required more nitric acid as raw material.

AMMONIA—Output increased 9 percent to total 531,492 tons, 52.5 percent being produced from natural gas, as compared with 42.9 percent the previous year. A new petrochemical plant at Ravenna accounted for both the increase and the changed raw material proportion.

SULFURIC ACID—Although still significant, this material lost its role as the primary index of the Italian chemical industry's development. A total of 701,100 tons was used in 1958, comprising 596,100 tons of pyrites, 36,000 tons of blendes, and 69,000 tons of sulfur ore and sulfur recovered from refinery gases.

Exports of sulfuric acid in 1958, going mostly to Greece and Yugoslavia, totaled 65,789 tons, a significant increase over the 19,394 tons exported in 1957. Imports were negligible.

ALKALIS—Production of caustic soda declined 10.9 percent to 263,874 tons, confined to a sharp decrease of about 40 percent in production by causticization; output by the electrolytic process showed a 12 percent increase.

CALCIUM CARBIDE — Output was 320,365 tons, or 29.4 percent from 1957 levels. Production was at capacity all year long to meet booming demand for acetylene and to take advantage of cheap "overflow" electric power.

PHOSPHATIC FERTILIZERS — Both production and consumption declined steadily in the years 1956-58, making way for fast-stepping nitrogen fertilizers.

Interhandel Trustee Named To Negotiate in GAF Case

Prospects for a settlement of the dispute between the US government and Interhandel A. G., a Swiss holding company, over ownership of General Aniline & Film Corporation have brightened.

Charles E. Wilson, former president of General Electric Company, has been appointed a trustee for the Swiss company, in which role he will negotiate with the government "to prepare and carry out a plan for the disposition of Interhandel's interests in the US."

This was said to be a hint that Interhandel may be preparing to propose settlement terms.

Chemway Corporation Adds Eye Items Via Acquisition

Chemway Corporation has added ophthalmology and optometry specialty products to its line through acquisition of Iso-Sol Company and its subsidiary, Contractisol, Inc., both of Lindenhurst, N. Y.

Iso-Sol and its ophthalmology specialties will be integrated into Crookes-Barnes Laboratories, Chemway's ethical drug subsidiary. Contractisol will become an operating unit of that subsidiary.

GULF

PROPYLENE TRIMER & TETRAMER

Highest quality and uniformity.
Immediate delivery.
Write or phone.

PETROCHEMICALS DEPARTMENT SALES OFFICE, GULF OIL CORPORATION

360 Lexington Avenue, New York 17, N. Y. • Quality Petrochemicals to Begin With

Gen'l Dynamics Drops Idea Of Buying Morgantown Plant

General Dynamics Corporation, New York, has jettisoned its plans to buy the government's chemical plant at Morgantown, W. Va. Confirmation of G-D's withdrawal came last week from the General Services Administration.

The General Dynamics action makes good a prediction of Frederick E. Greenman, attorney for Philadelphia & Reading Corporation, at the P&R stockholders meeting a month ago (OPD, 5/16/60).

General Dynamics had been thinking of buying the government facility to produce ammonia, nitric acid and other chemicals.

P&R, whose joint venture with G-D to exploit anthracite wastes for coal chemicals had collapsed in January, was cool to the new General Dynamics venture. In fact, it made it quite clear that it would go to court, if necessary, to block G-D's renewed interest in the chemical field.

Rice Bran Oil Process Would Use Raw Alcohol

The Central Food Technological Research Institute at Mysore, India, is designing a 10-ton plant to extract high-grade edible oil from rice bran, according to reports to the Foreign Agricultural Service.

The Institute has evolved a new process of recovering the oil by solvent extraction using industrial alcohol, a by-product of the Indian sugar industry. If the results are satisfactory, large-scale production will be possible, it is stated.

Bran constitutes 6 to 13 percent of rice and has an oil content of 10 to 22 percent. Rice bran oil is rich in vitamins and is suitable both as a cooking and salad oil.

Drug Law Tightening

—*Continued from page 3*

chloramphenicol and bacitracin, has long been favored by the agency, although never formally proposed to congress.

The certification system was originally proposed as an emergency temporary procedure, but industry has never been able to dislodge it.

One note of interest in connection with these proposed changes in the drug law that is not being overlooked by the drug manufacturers is the fact that the record that has been built up in support of the changes has been before a committee that has nothing to do with the food, drug and cosmetic law.

Jurisdiction over this law rests with the labor and public welfare committee of the senate and the commerce committee of the house. It is unlikely these committees would act simply on the record made before the Kefauver committee. They would want to hear both industry and the government on the issues first.

A Background of Emotion

Mr. Flemming made the recommendations to the Kefauver committee against a background of highly emotional testimony concerning committee charges of conflict of interest against Dr. Henry Welch, former head of the antibiotics division of FDA and earlier testimony which appeared to cast some doubt on the value of drugs produced by small manufacturers.

Mr. Flemming appeared primarily to defend his agency over its handling of the Welch matter and offered these and other recommendations when invited by the committee to express his views on the food and drug law.

He conceded that the committee had uncovered shortcomings in the law, and that the inquiry had served a good purpose of showing up irregularities within FDA.

These irregularities are to be the subject of a special investigation by Mr. Flemming. He is appointing a three-man group from outside the department to probe allegations of "back-door" influence in the FDA. The committee is to be made up of a professional investigator, a legal expert and a medical scientist.

Antibiotics Division Probe

Another committee of scientists appointed by Dr. Detlev Bronk, president of the National Academy of Sciences, at the request of Mr. Flemming, will investigate the policies, procedures and decisions of the antibiotics division while Dr. Welch was its head.

In the concluding hearing on the Welch case last week, Secretary Flemming expressed "regret" that he had not checked Dr. Welch's claim of receiving only "honoraria" for his outside publishing activities.

He defended his failure on the grounds that he had no reason to be suspicious since Dr. Welch's superiors had long permitted his outside work.

Dr. Welch was forced to resign last month by Mr. Flemming after records produced by the committee showed he had received over $287,000 since 1953 for editorial work on scientific journals in the antibiotics field.

Canadian Chemical Awards Lab Construction Contract

Canadian Chemical Company has awarded a contract for the construction of new research laboratories to Poole Construction Company Ltd. The labs will be built at Edmonton at a cost of $285,000.

Included in the new unit will be laboratories for organic, physical, by-product, pilot and analytical sections along with others for development work on petrochemicals and cellulose compounds. Approximate area of the building is 11,000 square feet.

Pharmacists Slate Luncheon

Midwest Pharmaceutical Advertising Club will hold a joint luncheon with the Pharmaceutical Advertising Club of Montreal, tomorrow (June 14) at the Algiers hotel, Miami Beach, Fla. Carson Frailey, a Washington, D. C. attorney, will report on the "Highlights From the Capitol."

CHEMICAL FORECAST 1964

AROMATIC SOLVENTS
Benzene • Toluene

NITROGENATES
Urea • Ammonia

POLYMER CHEMICALS
Vinyl Resins • Polyethylene Resins • Styrene-Butadiene Synthetic Rubber

THE ALCOHOLS
Ethyl Alcohol • Methanol

ETHYLENE CHEMICALS
Ethylene Oxide • Ethylene Glycol • Diethylene Glycol

INORGANIC CHEMICALS
Caustic Soda • Chlorine

MISCELLANEOUS ORGANICS
Phenol • Detergent Alkylate • Formaldehyde

28 Statistical Tables and 19 Charts

$2.25

OIL, PAINT AND DRUG REPORTER
Reprint Department • 30 Church Street, New York 7, N. Y.

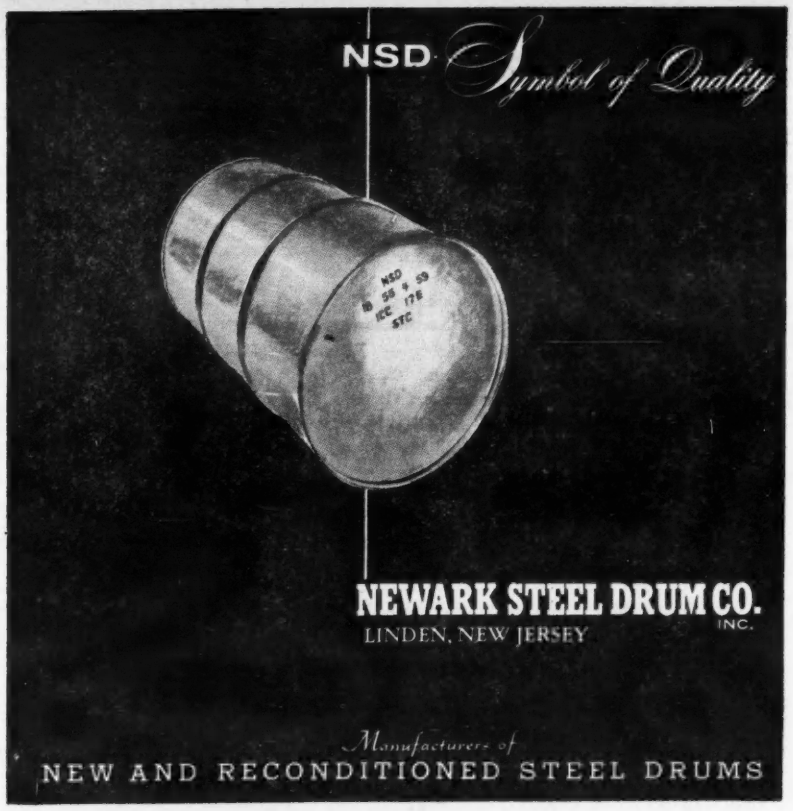
Buy your plasticizers from BASIC PITTSBURGH and enjoy these four big advantages!

1. Pittsburgh is a *basic* plasticizer producer. Rigid quality control from coal to finished product assures you highest purity plasticizers.
2. Pittsburgh maintains complete stocks and shipping facilities at Pittsburgh, Boston and Lyndhurst, N. J. Pittsburgh PX Plasticizers are never more than an overnight truck haul away.
3. Pittsburgh has an experienced technical service department. Its competent personnel are completely at your service, right in your plant when needed.
4. Pittsburgh maintains a constantly growing investment in production facilities and a vigorous, long-range plasticizer research program.

Its one objective is to provide you with *better plasticizers at lower cost*—today and ten years from today!

1160

INDUSTRIAL CHEMICALS DIVISION
PITTSBURGH CHEMICAL CO.
GRANT BUILDING PITTSBURGH 19, PA.
A Subsidiary of PITTSBURGH COKE & CHEMICAL CO.

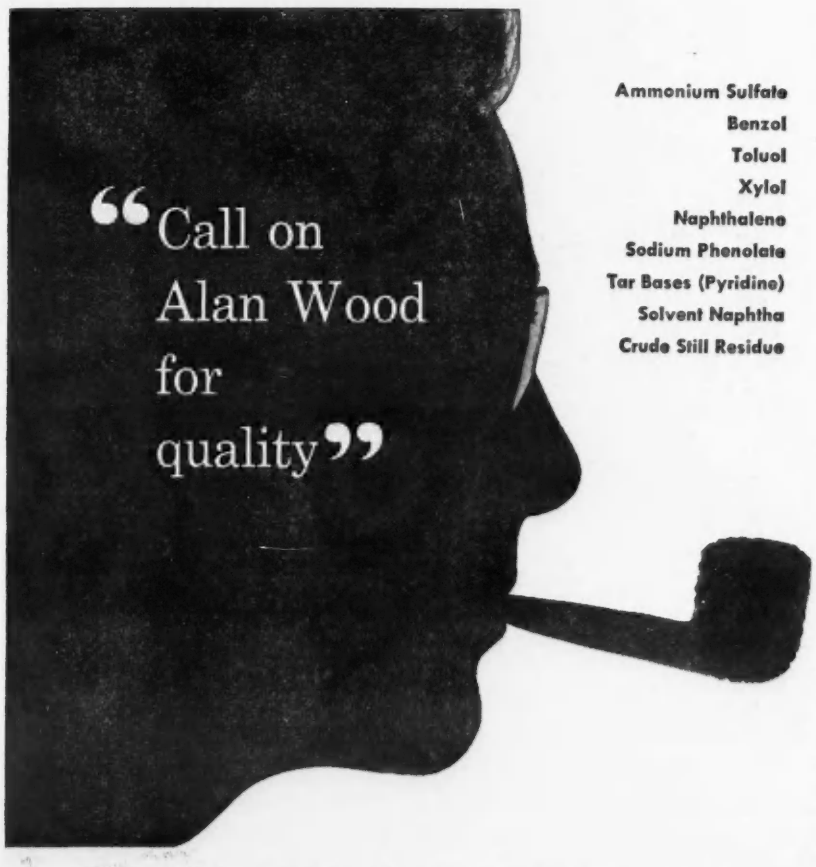


IRON FILINGS
(GROUND CHEMICAL IRON)

ELIZABETH 1, NEW JERSEY: 200 S. SECOND ST.

CONNELLY, INC.
SINCE 1876

CHICAGO 8, 3154 S. CALIFORNIA AVE.



Ammonium Sulfate
Benzol
Toluol
Xylol
Naphthalene
Sodium Phenolate
Tar Bases (Pyridine)
Solvent Naphtha
Crude Still Residue

Write or call Industrial Coke and Chemicals Sales Department

ALAN WOOD STEEL COMPANY

Conshohocken, Pa. • steelmasters for more than a century and a quarter

Makers of "A.W. Algrip" Abrasive Rolled Steel Floor Plate. • "A. W. Super Diamond" Rolled Steel Floor Plate • "A. W. Dynalloy," Low Alloy, High Strength Steel • A. W. Iron Powder • Cold Rolled Sheet and Strip • Hot Rolled Sheet and Strip • Sheared Plates • Foundry and Industrial Coke • Coal Chemicals • Mine Products • "Penco" Lockers, Shelving and Cabinets.

OPD Reports From Europe

UK Price, Material Pacts in Limbo

—*Continued from page 5*

essential oils, fire fighting chemicals, thirty-two agreements on insecticides, melamine molding powders, pharmaceutical products, polyethylene tubing, proprietary medicinal preparations, polyvinyl chloride sheets, shellac, ammonium sulfate, sulfur, sulfuric acid, synthetic resins, wood preservatives, varnish and waxes.

Not all these agreements are concerned with price-fixing or terms of sale. Some set standards for apparatus. Some are agreements or contracts between individual companies covering exclusive supply or prices to third parties. Some cover the entire United Kingdom, while others are restricted to counties or smaller sections of the country. Most, however, do function to control either costs or prices or business operations.

Details of the cases now under court study are not available. The UK Glycerine Producers agreement sets prices and export differentials for the more than forty members of the association, including most major soap makers.

The agreement particularly notes the need "to enable fair selling prices to be negotiated with large buyers." The rules of the association state firmly that "members shall adhere to any prices or terms of sales which the council [of the association] may from time to time prescribe for such sales."

A Glycerine Producers spokesman admits that proceedings are taking place concerned with price-fixing, but adds that the British association cannot comment on the case while it is being considered by the court.

The UK's glycerine imports in 1959 totaled a little over 10,000 tons worth $4,350,000, up from $4,050,000 in 1958. The US share of 1958 imports, last year for which official figures are available, was nearly $700,000. UK annual production is estimated at about 30,000 tons of crude 80 percent glycerine a year.

How Sulfur Pool Operates

The National Sulphuric Acid Association operates an imported sulfur pool for all the sulfuric acid producers in the UK. The members purchase their imported sulfur requirements from the pool and the rules of the association stipulate that "no member shall purchase sulfur elsewhere except by agreement." The pool operates on a no-profit, no-loss basis and was first set up in the 1920's.

The Sulphuric Acid Association also declines to comment on the case while it is before the court. But it is understood that the court has agreed to let the association represent all its members instead of proceeding against each member individually.

The US share of UK sulfur imports in 1959 was 261,279 tons, 70 percent of the total 375,370 tons. The average price was $30.10 a ton for the US product and $30.24 a ton for the total of all imports. Total consumption of sulfur in the UK last year is estimated at about 1,152,000 tons, of which 856,000 tons went into acid.

It is clear that a court-dictated change in UK sulfur-importing procedures might have a considerable effect on sales operations of US sulfur producers now selling to Britain through the import pool.

As an example of a slightly different type of trade agreement on file, the makers of polyethylene tubes manufactured in accordance with British Standard 1972 formed a group called "Club 1972" to fix conditions of sale and prices.

This agreement states that volume discounts for total lengths of tubing are limited to single deliveries and that such discounts cannot be spread over multiple deliveries on a single order. It fixes trade discounts at 25 percent for supply houses, and 15 percent to plumbers and government departments.

Dominant Role of ICI Recognized

Recognizing the dominant position of Imperial Chemical Industries, Ltd., in the British polyethylene business when the agreement was written, Club 1972 also stated that "the manufacturer of the raw material [ICI] also manufactures more than half the polyethylene tube produced in the UK and in practice the members of the club adopt the selling prices and discounts fixed by that manufacturer, although there is no express agreement between the members to do so."

In the phenol case, the Restrictive Practices Court held the producers' association agreement had four main features:

- It fixed the price substantially above the free market price.
- The price fixed was not and never had been related to production costs.
- The association's policy was to charge what the traffic would bear.
- There was the usual rigidity of a price-fixing scheme.

In its defense, the phenol producers argued that the present excess of supply over demand would increase in the future and last for about five years, that removal of the price restriction would cause a price drop of about 25 percent, that such a price drop would tend to divert tar from distillers to fuel uses, that such a diversion would not be in the public interest, and that the price-control system had insured an increasing supply of phenol to meet an erratically increasing demand.

The court rejected these arguments, stating that the real reason for the increased supply "has been the rapid and on the whole steady increase in demand for phenol, especially for the growing plastics industry."

Court Notes Two Makers Outside Ass'n

Taking note of the fact that the association's coaltar-based membership accounts for only about one-third of UK phenol output, the court added: "Two of the large synthetic producers are outside the association and are making at any rate some sales below the fixed price."

Under the association, the price of phenol was raised from 12 cents a pound at the end of 1949 to 21 cents a pound in May of 1951, remaining at that price for two years when it was reduced to the current 19 cents a pound, compared to the US tankcar price of 14.75 cents a pound for 90-92 percent natural material.

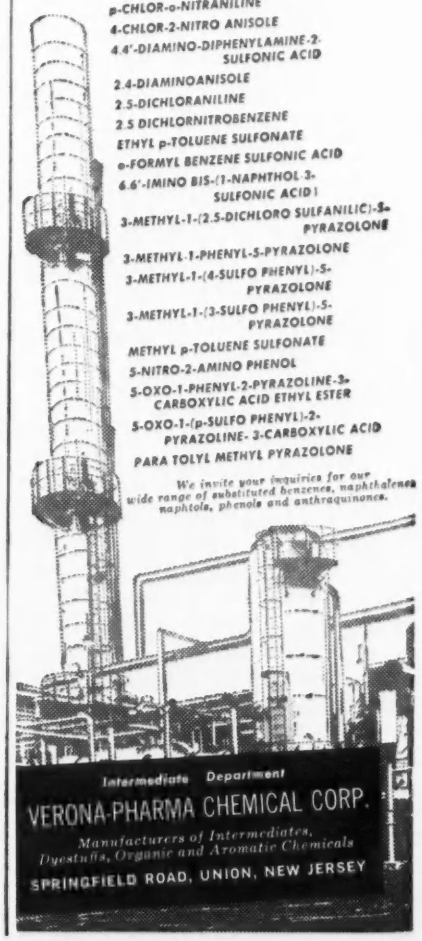
During the period of the 21-cent price, the UK phenol shortage turned into a surplus. Trade sources report that most phenol purchase contracts run to mid-year.

VERONA INTERMEDIATES meet today's higher purity standards!

WE LIST THE FOLLOWING AS EXAMPLES OF OUR EXTENSIVE PRODUCT RANGE.

AMIDOL
o-AMINOPHENOL
p-AMINOPHENOL
4-AMINO-2-NITROPHENOL
7-ANILINO-1-NAPHTHOL-3-SULFONIC ACID
4-CHLORO-2-AMINO ANISOLE
o-CHLORANILINE
p-CHLOR-o-NITRANILINE
4-CHLOR-2-NITRO ANISOLE
4,4'-DIAMINO-DIPHENYLAMINE-2-SULFONIC ACID
2,4-DIAMINOANISOLE
2,5-DICHLORANILINE
2,5 DICHLORNITROBENZENE
ETHYL p-TOLUENE SULFONATE
o-FORMYL BENZENE SULFONIC ACID
6,6'-IMINO BIS-(1-NAPHTHOL 3-SULFONIC ACID)
3-METHYL-1-(2,5-DICHLORO SULFANILIC)-5-PYRAZOLONE
3-METHYL-1-PHENYL-5-PYRAZOLONE
3-METHYL-1-(4-SULFO PHENYL)-5-PYRAZOLONE
3-METHYL-1-(3-SULFO PHENYL)-5-PYRAZOLONE
METHYL p-TOLUENE SULFONATE
5-NITRO-2-AMINO PHENOL
5-OXO-1-PHENYL-2-PYRAZOLINE-3-CARBOXYLIC ACID ETHYL ESTER
5-OXO-1-(p-SULFO PHENYL)-2-PYRAZOLINE-3-CARBOXYLIC ACID
PARA TOLYL METHYL PYRAZOLONE

We invite your inquiries for our wide range of substituted benzenes, naphthalenes naphtols, phenols and anthraquinones.


Intermediate Department
VERONA-PHARMA CHEMICAL CORP.
Manufacturers of Intermediates, Dyestuffs, Organic and Aromatic Chemicals
SPRINGFIELD ROAD, UNION, NEW JERSEY

Trade Name Chemicals & Specialties

American Alcolac announced a 3 cent across the board reduction in the price of **"Sipon ES,"** sodium lauryl ether sulfate. The material is newly quoted in tank-trailer quantity at 19½ cents a pound, carload or truckload of 55-gal. drums is 20½ cents a pound; less truckload lots, same packing, area 21½ cents a pound, and price on a 6-gal. pail is 37 cents a pound. Prices are f.o.b. Baltimore, Md., with freight allowed East of the Mississippi. Prices West of the Mississippi are 15 cents per pound less with no freight allowance.

The company markets an extended line of **"Sipon"** lauryl alcohol sulfates as well as sodium fatty alcohol and ether sulfates for use in the cosmetic industry for use in shampoos. Various types of **"Sipons"** are offered by the company for specific applications where high viscosity, lower salt content, lower cloud point or greater foaming ability are desired.

The company markets an extended line of **"Sipon"** lauryl alcohol sulfates as well as sodium fatty alcohol and ether sulfates for use in the cosmetic industry for use in shampoos. Various types of **"Sipons"** are offered by the company for specific applications where high viscosity, lower salt content, lower cloud point or greater foaming ability are desired.

Organon Inc. has announced the availability of **"Cotazym"** which the company terms the first pancreatic enzyme preparation to contain a known, constant measurable amount of lipase, the pancreatic, fat-digesting enzyme. Research by Organon chemists developed a reliable assay for lipase and a method for preserving its activity. Thus, "Cotazym" represents complete and effective pancreatic enzyme replacement therapy, the company says. In proper dosage it is reported to provide sufficient lipase, trypsin and amylase to digest what fat, protein and carbohydrate are contained in the diet.

The company reports that each "Cotazym" capsule contains a concentration of lipase having digestive power for 17 grams of dietary fat; trypsin, having digestive power for 34 grams of dietary protein; amylase, having digestive power for 40 grams of dietary starch; plus other enzymes from whole hog pancreas.

Organon points out that from the standardized lipase content of each capsule, the physician may predetermine the exact dose needed to digest the fat content of a given diet.

Adhesives

The Borden Chemical Company markets **"Casco"** casein glues for bonding wood to wood, wood to metals and no-clamp gluing of flushed doors. These materials have been used for many years because of durability and ease of handling in woodworking, the company reports, and they generally bond all species of woods at moisture content of 2 to 20 percent. The glues can be cured at any temperature from just above freezing to 212 degrees F. They find use for cold press, lumber laminating, plastic laminating, and assembly gluing.

Various grades of **"Casco"** glues have been developed to suit working conditions and specific applications. For example, **"Casco 1115"** is a high-grade casein glue primarily developed for government specification work for lumber laminating where longer than normal assembly times are desirable. For bonding metals to wood, the company recommends the use of **"Casco NT-442,"** a white, liquid, casein-latex dispersion that bonds wood to aluminum and aluminum alloys, to stainless steel, hot rolled steel, iron or galvaneal, nickel alloys, lead, chromium, zinc, and magnesium. It is possible to obtain strong, water-resistant, metal-to-wood bonds with a single glue application; cold, intermediate or hot press; or with high frequency heating, Borden reports.

The company's phenol-resorcinol resins are tradenamed **"Cascophen"** and find use for general and marine laminating and for hot pressing plywood and hardwood panels to wood stiffeners and frames. They are recommended for gluing all species of untreated woods or woods treated with fire retardants or preservatives, or for gluing compregnated woods and other dense materials wherever a completely durable bond is required.

"Cascorez CV-765" and **"CV-771"** are Borden's polyvinyl acetate adhesive formulations ready for use. The materials have good storage stability, a tolerance for low temperature and high humidity gluing conditions, improved dry strengths and good filling action on rough surfaces. Other **"Cascorez"** formulations find use as packaging adhesives in bag seaming, case-sealing, folding boxes, labeling and paper laminating as well as a number of other specialty applications.

Eastman Chemical Products markets **"Eastman 910 Adhesive,"** the main component of which is methyl 2-cyanoacrylate. Polymerization of the chemical takes place readily especially in the presence of minute amounts of moisture, the company reports. The unset adhesive, however, may be exposed to the atmosphere for a period of several hours without polymerizing or hardening. When the adhesive is spread or pressed into a thin film between two surfaces, bond formation is effected. In addition to the monomer, methyl 2-cyanoacrylate, the commercial-grade adhesive contains a plasticizer to improve the flexibility of the bond and a thickening agent to increase the viscosity for easier application. Among advantages of the material, Eastman reports, are good coverage, room temperature curing, high-strength bonds, rapid-set, no extensive surface preparation necessary and the fact that it is a one-component system.

Fatty Acids and Alcohols

Hercules Powder Company markets two high molecular weight primary amines and their acetic salts. **"Delamin P"** is the tradename for the technical grade of these two amines. In addition, a high-purity distilled form containing the highest percentage of primary amine is marketed as **"Delamin PD."**

These amines are derived from eighteen-carbon fatty acids of tall oil origin. The amines can be converted to many other salts and derivatives. Hercules feels they would be of particular interest for synthesis of compounds for use in fields such as pharmaceuticals, insecticides, disinfectants and preservatives. Through the reactive amine group, the materials undergo the various types of reactions commonly associated with most primary aliphatic amines.

E. I. duPont de Nemours and Co. produces the **"Lorol"** series of fatty alcohols derived from refined coconut oil by high-pressure hydrogenation in the presence of a special catalyst. Coconut oil is one of the few natural oils containing large percentages of glycerides of lauric and myristic acids, and these are converted to lauryl and myristyl alcohols in the process. The mixture from the hydrogenation process is then filtered to remove the catalyst and is subsequently refined to give **"Lorol"** fatty alcohols.

Among the more prominent fatty alcohols supplied by the company are **"Lorol 5, 7, 9"** and **"11"** which are technical lauryl alcohols containing primarily lauryl and myristyl alcohols in varying propor-

—*Continued on page 67*

WHAT'S REPORTED ON HERE

Though coverage in the Trade Name Chemicals & Specialties market report encompasses twenty classes of chemicals, only a few of them are mentioned in this issue. Here's the entire list:

Adhesives, antibacterials and fungicides, antifoaming agents, antioxidants, antistatic agents, blowing agents, catalysts and accelerators, chelating agents, chemically processed oils, emulsions and latexes, enzymes, fatty acid derivatives, feed supplements, filtering materials, ion exchange resins, surfactants, synthetic waxes, textile chemicals, thickening and suspending agents, and ultraviolet absorbers.

If you have suggestions for any additional materials that might be included in this section, write OIL, PAINT AND DRUG REPORTER'S Technical Editor, 30 Church street, New York 7.

METOL
Monomethylparaminophenol Sulfate
Registered Trade Mark
TANNIC ACID GALLIC ACID
(U.S.P. and Technical Grades)
PYROGALLIC ACID
(U.S.P. and Technical Grades)
THE HARSHAW CHEMICAL CO.
CLEVELAND 6, OHIO
Cleveland • Chicago • Cincinnati • Detroit • Hastings-on Hudson, N. Y.
Houston • Los Angeles • Philadelphia • Pittsburgh

OPD REPRINTS
35 CENTS A COPY
Iron Oxides • Soybean Oil • Enzymes • Bromine • Benzene Hexachloride • Methylamines • Phthalic Anhydride • Optical Brighteners • Acetone • Maleic Anhydride • Lysine Monohydrochloride • DDT • Ultraviolet Absorbers • DOP and DIOP • Butadiene • Styrene • Chelating Agents • Titanium Pigment
OIL, PAINT AND DRUG REPORTER
REPRINT DEPARTMENT, 30 CHURCH STREET, NEW YORK 7, N. Y.

For Vitamins

send your inquiries to

ROCHE ROUND the WORLD

THE ROCHE COMPANIES:

ARGENTINA:	Productos Roche S.A., Buenos Aires
AUSTRALIA:	Roche Products Pty. Ltd., Sydney
AUSTRIA:	Hoffmann-La Roche Wien GmbH., Wien V/55
BELGIUM:	Produits Roche S.A. Belge, Bruxelles-Midi
BRAZIL:	Produtos Roche S.A., Rio de Janeiro
CANADA:	Hoffmann-La Roche Ltd., St. Laurent, Montreal 9, P. Q.
COLOMBIA:	Productos Roche S.A., Bogotá
CUBA:	Productos Roche S.A., La Habana
ENGLAND:	Roche Products Ltd., London, W.1.
FRANCE:	F. Hoffmann-La Roche & Cie., Paris IVe
GERMANY:	Deutsche Hoffmann-La Roche A.G., Grenzach (Baden)
INDIA:	Roche Products Private Ltd., Bombay 1
ITALY:	Prodotti Roche S.p.A., Milano
JAPAN:	Nippon Roche K.K., Tokyo
MEXICO:	Productos Roche S.A., Mexico 12, D.F.
SOUTH AFRICA:	Roche Products (Pty) Ltd., Johannesburg
SPAIN:	Productos Roche S.A., Madrid
SWEDEN:	Roche-Produkter Aktiebolag, Stockholm
SWITZERLAND:	F. Hoffmann-La Roche & Co. A.G., Basel
TURKEY:	Roche Müstahzarlari Sanayi Ltd., Şirketi, Istanbul
URUGUAY:	Roche International Inc., Montevideo

Roche agencies in other countries

Fine Chemicals Division • **Hoffmann-La Roche Inc** • Nutley 10, N. J.

© 1960 HLR Inc. Roche®

A LEADER IN BIOCHEMICAL RESEARCH

attention: / **Purchasing Director**

offers over 60 regular items
to the pharmaceutical...cosmetic...dairy
...and chemical industries...including—

ENZYMES • ANTIOXIDANTS • HORMONES
FINE CHEMICALS • GLANDULARS

plus 20 items for experimental purposes,
such as—ANIMAL BLOOD FRACTIONS,
ORGANIC CHEMICALS, BIOCHEMICALS,
INCLUDING SPECIAL ENZYMES

For more information, contact our technical representatives. Call WElls 2-6771 in Kankakee, Illinois.
Or write to:

Bio-Chemical Dept.
ARMOUR PHARMACEUTICAL COMPANY
Kankakee, Illinois

Drugs, Fine Chemicals

A leading drug and fine chemicals maker, already a major producer of chemicals-for-cleaning, is reportedly preparing to offer a granular form of technical sodium gluconate. Obviously, this is intended to compete with the flake material now being sold by another manufacturer. Nothing like a major marketing battle looms, of course, although requirements for the chemical are relatively large at present and the potential for continued, steady growth is excellent. Current usage is estimated at 4 million pounds a year, divided between two major applications, bottle washing and metal finishing.

The larger of these markets reportedly is bottle washing in which sodium gluconate is used in conjunction with caustic soda. Large volume buyers in this area are the breweries, soft drink bottlers, and, to a lesser extent, dairies.

Acceptance of the milk carton and cola-in-cans are seen as negative influences but not as restricting expansion of the overall market. The simple fact of population growth, requiring that more foods and beverages be packed in more glass bottles, will offset other losses, a trade source says.

Although a powdered sodium gluconate has been offered right along by both of the firms referred to above, this material has been losing out to the flake form. The latter, it's said, is now preferred by several users for bottle washing. This would explain why a granular form is soon to be offered.

Prices for granular material will probably be competitive with the flake, which is now selling at 36 cents a pound in carload quantities (1½ cents higher west of Denver).

Spot prices for Brazilian menthol have weakened, reflecting a decline in immediate demand and the anxious attitude on the part of certain dealers this occasioned. Last week, large crystals were listed at $8.50 a pound, the regular crystals at $8.30 to $8.40, 10 cents a pound lower than prices most recently quoted by OPD.

Of the 54,763 pounds of vitamins and vitasterols not specifically classified by the Census bureau imported in April, a mere three pounds came from Switzerland. Proving that big things can come in little packages, these three pounds were valued at $10,623, and carried a correspondingly high duty of $1,115.

Ascorbic Acid—April imports, totaling 41,073 pounds, were valued at $134,676 and dutied at $14,133. Shipping here were Japan 25,795 pounds; Denmark 11,023; France 3,748; and West Germany 507.

Aspirin—Requirements for bulk aspirin are still good, indicating perhaps that some tableters expect summertime sales to be better than average. It could also reflect the common practice of pharmaceutical manufacturers—and much of industry, as well—to build up finished inventories in advance of plant vacation shutdowns which normally start in July.

Calcium Pantothenate—Cal pan is selling on the open market at about $21 to $22 a kilo reportedly, as opposed to the $35 list. Downtrend reflects several factors, it's said, including low-cost imports, decline in prepared feeds markets this winter, and lower raw material costs.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	June 12, 1959
60.25	60.25	60.36	60.61

For Current Prices see Page 10

July 1 Price Advance

Sodium Hypophosphite, 2c. per lb.

Manufacturers of the nutritional product that use their production captively in the preparation of animal feeds have not been effected, of course.

Gelatin—Stocks of gelatin at the end of April totaled 10,814,000 pounds, down from 10,843,000 on March 31, and 13,040,000 on April 30, 1959.

Production and shipments, while above the April 1959 level, were also down from March, according to statistics just released by the Census bureau.

Production was 5,188,000 pounds in April, the bureau says, compared with 5,601,000 in March and 4,768,000 in April 1951. Of the total, 4,547,000 pounds were manufactured from hides and the remainder (641,000) from ossein. Broken down by type, output was in thousands of pounds: edible 3,634; technical 303; pharmaceutical 250; and photographic 1,001.

April shipments were 5,217,000 pounds, as against 5,931,000 in March, and 4,904,000 in April 1959. By type, shipments were in thousands of pounds: edible 3,665; technical 266; pharmaceutical 263; and photographic 1,018.

Stocks, classified by type, were in thousands of pounds: edible 5,156; technical 852; pharmaceutical 1,052; photographic 3,754.

Inositol—A major producer recently advanced prices of inositol 25c. per pound across the board. Action set the schedule at $4.50 a pound for 1,000 pounds or more and at $4.75 a pound for lesser quantities packed in 50- or 100-pound drums; at $5 a pound for 10 to 50 pound lots packed in 10-pound containers; and at $5.25 a pound for 5-pound bottles, any quantity.

Reporting the change, spokesman for the firm indicated that the higher prices reflected the rising costs of manufacturing the pharmaceutical. Labor and handling charges have gone way up during the past year, he explained.

Having vitamin activity, inositol—specifically 1-inositol, one of nine isomers—is incorporated in pharmaceutical preparations and used medically in the treatment of such diseases as hepatitis.

Domestic consumption of inositol is estimated at 150,000 pounds annually. Added to this are relatively large export requirements.

Iodine—The earthquakes in Chile will not effect availability of crude iodine here. Both nitrate and copper facilities are located in the extreme north of the country which escaped the destruction that befell other sectors, a trade source explains, adding only that shipping was disrupted temporarily and not seriously.

Most of the US demand for crude iodine is supplied by Chile. Japan also exports here, but the quantity reportedly

Drugs and Fine Chemical Imports: April

Imports of selected drugs and fine chemicals for the months of March and April, 1960, as reported by the Bureau of Census, were as follows:

		April	March
Ascorbic acid	lbs.	41,073	46,185
Caffeine	lbs.	77,846	76,713
Camphor, crude	lbs.	0	4,000
Refined	lbs.	18,000	19,700
Synthetic	lbs.	80,700	111,900
Iodine, crude	lbs.	144,318	190,345
Menthol:			
Natural	lbs.	101,864	49,354
Synthetic	lbs.	22,487	22,475
Pyridoxine	lbs.	1,194	1,797
Quinidine and salts	ozs.	92,929	83,764
Quinine sulfate	ozs.	0	0
Saccharin	lbs.	12,856	28,318
Sodium alginate	lbs.	45,000	19,462
Tartaric acid	lbs.	32,861	506,195
Thiamin	lbs.	7,008	1,323
Theobromine	lbs.	1,653	19,684
Vitamins and vistasterols, n.e.c.	lbs.	54,763	41,174

Drugs, Fine Chemicals

is too small to be a significant factor—price-wise especially. Some months, of course, Japanese shipments do represent a considerable percentage of total imports—witness April figures—but on an overall basis, this is not the case. In 1959, for example, Chile shipped 1,243,201 pounds of iodine to the US, according to Census bureau statistics, while Japan shipped 223,037.

Figures for April 1960, just released by the bureau, show that imports totaled 144,318 pounds (value: $108,026), of which Chile supplied 113,272 pounds and Japan the remainder (31,046).

Markets for iodine are mostly well- and long-established. A new application has been developed, however, which shows considerable promise. Reported here several months ago, this is the use of iodine, as a partial replacement for chlorine, as a swimming pool disinfectant.

Crude iodine is listed at 95c. a pound.

Menthol—Prices for Brazilian menthol have weakened, reversing a trend that was steadily upward. Last week, according to trade reports, large crystals were selling here at $8.50 a pound, the regular crystals at $8.30 to $8.40 a pound, 10c. lower than listings previously carried by OPD.

The downtrend reportedly reflects the lack of immediate strong demand and the anxious attitude on the part of certain sellers of the material this occasioned. Shipping prices have not dropped, however, and offerings from Brazil for nearby shipment are merely modest.

Traditionally, the approach of summer saw menthol demands taper off. This was because until recently pharmaceutical preparations that had a cold weather market were the major if not sole use. Now, however, as much if not more menthol is being used in cigarettes, toothpastes and the like and, consequently, menthol requirements over the summer run into larger volume. There is still a tapering off, of course.

Imports of natural menthol in April, according to the Census bureau, were 101,864 pounds, up from 49,354 in March. This material came from Brazil 68,056 pounds; Japan 20,200; Taiwan 8,100; Australia 4,008; and West Germany 1,000.

Imports of synthetic menthol in April, totaling 22,487 pounds, came from France 18,842; Spain 3,307; and West Germany 338.

Saccharin—April imports of saccharin—all from Japan—totaled 12,806 pounds. Value was $19,138, the duty $4,017.

Sodium Hypophosphite—A producer will boost the price of sodium hypophosphite 2c., to 99c. a pound in 1,000 pound lots, July 1.

Thiamin—Thiamin imports rose to 7,008 pounds in April from 1,323 pounds in March, 2,386 in February and 3,527 in January. The total quantity was valued at $62,306 and dutied at $6,536, according to the Census bureau.

Major supplier in April was Japan with 3,327 pounds. Others were Denmark 2,408; Panama 1,058; and Italy 220.

Based on monthly Tariff Commission reports, US production of thiamin and derivaties during the first quarter of 1960 amounted to 68,661 pounds. Equal to about 10½ percent of this figure, imports during the same period were 7,236 pounds.

Botanicals

Extent of domestic botanical collections this season is still unknown. Small lots of some items, including white pine and wild cherry barks, have been trickling in, but, in general, dealers here have seen little new crop material.

Among the imported items, agar, tolu balsam, and both arabic and karaya gums are relatively strong. Otherwise, demands are routine.

Colchicum Seed—While in tight supply this winter, colchicum seed was priced at $1 a pound and even higher but with new crop availability listing dropped to 75c.-80c. a pound, the current level. Demand, strong immediately following new crop arrivals, has lately turned spotty. There's no change in the price on the root; it remains at 30-35c. a pound.

Gum Arabic—Prices remain strong with continuing good interest noted. This is more than just a temporary thing. Imports in 1959 according to Commerce department reports, were 14 percent higher than in 1958. This, the department said, could be explained by new uses and increased US population in addition to the retention of old markets.

Papain—Four lots—102 crates, 51 chests, 112 half-chests—of papain were detained by the Food & Drug Administration at the port of New York during the two-week period ended June 3.

HORMONES

DEHYDROCHOLIC ACID, N.F.
(Oral and Injectable Grades)
OX BILE USP
DRIED OX GALL POWDER

We invite your inquiries

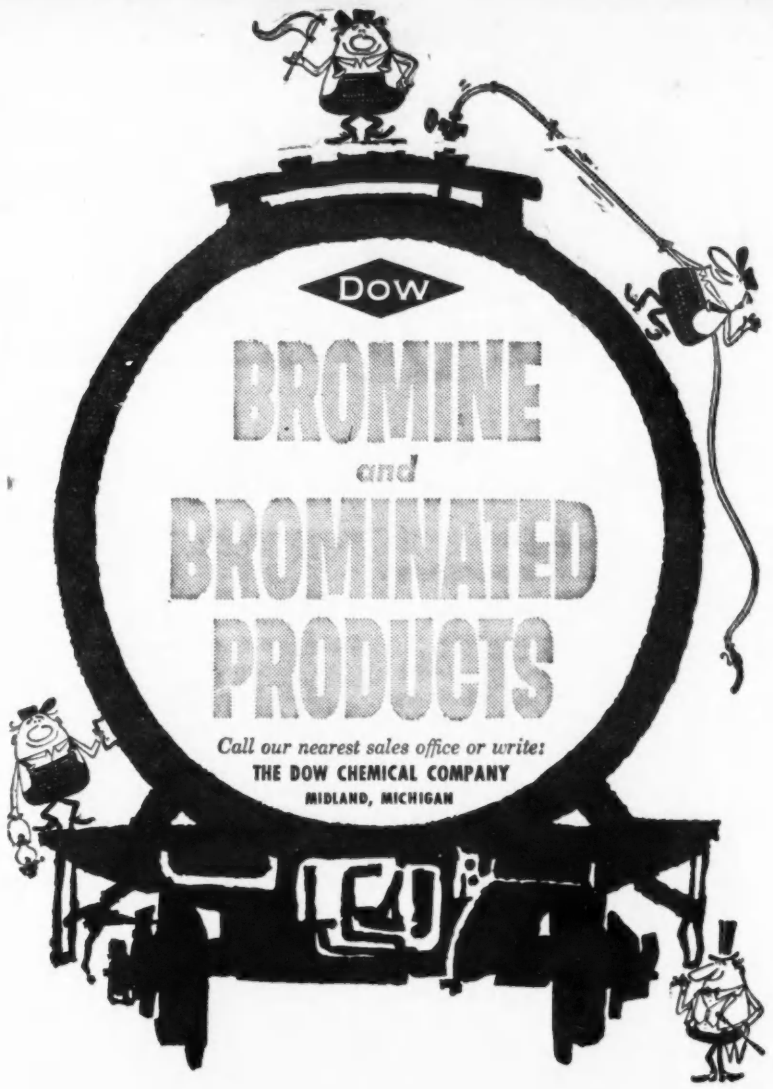
GEDEON RICHTER
PHARMACEUTICAL PRODUCTS INC.
20 Exchange Place, New York 5, N. Y.

NOW OVER 5100 BIOS CHEMICALS

- 4,4'-DIPHENYLBIPHENYL
- DIPHENYLCARBAMYL CHLORIDE
- DIPHENYLDICHLOROSILANE
- DIPHENYLGLYCINE
- DIPHENYLHEXATRIENE
- DIPHENYLHYDROXYLAMINE
- DIPHENYLINE
- DIPHENYLPHOSPHORYL CHLORIDE
- 4,4'-DIPIPERIDYL
- 4,4'-DIPYRIDYL HYDROCHLORIDE
- 2,2'-DIQUINOLYL
- β-DISTEARIN
- DITHIODIGLYCOL
- αβ-DITHIOPROPIONIC ACID
- DITHIORESORCINOL
- DITHIOSALICYLIC ACID
- DITHIOTHYMINE
- DITHIOURACIL

Ask for our new complete catalogue.

BIOS Laboratories, Inc.
17 West 60th St. New York 23, N. Y.
PLaza 7-8171



PEDER DEVOLD

PEDER DEVOLD
FINEST MEDICINAL
COD LIVER OIL USP
All potencies Vitamin Tested

DEVOLKOD® VITAMIN OILS
(Fortified Cod Liver Oils
for Veterinary Use)
DEVOLD VITAMIN A & D
FEEDING OILS
DEVOLD VITAMIN A OILS
ABOVE OILS ARE "STABILIZED"

DEVOLKOD NON-DEST.
COD LIVER OIL U.S.P.
PEDER DEVOLD WHEAT GERM OIL
IMPORT EXPORT

PEDER DEVOLD OIL COMPANY
division of
CHAS. L. HUISKING & CO., Inc.
417 Fifth Ave., New York 16, N. Y., Phone: ORegon 9-8400. Cables: Vitamine, N. Y.
Plant & Warehouse: Lyndhurst, N. J. Chicago Office: 435 N. Michigan Ave.

PAD
EST. 1914

MENTHOL
NATURAL U. S. P.

PAUL A. Dunkel AND CO. INC.
IMPORTERS AND EXPORTERS

26 JOURNAL SQ., JERSEY CITY 6, N. J. TEL: OLDFIELD 6-6400
N. Y.: WORTH 4-3341 CHICAGO: 320 W. OHIO ST. SU. 7-2462
AGENTS IN PRINCIPAL CITIES

IMPORTS at United States Ports

New York

ACENAPHTHENE—30 dms, Henley & Co, Rotterdam
15 dms, F L Kraemer, Rotterdam
ADIPHENINE—1 dm, Tuteur Bio Chemicals Inc, Genoa
AGAR—34 bls, T M Duche & Sons, Pusan
ALOE—100 cs, Selma Mercantile Corp, Curacao
124 cs, J M Rodriguez & Co, Puerto Cabello
200 cs, S B Penick & Co, Aruba
ALUMINUM FLUORIDE—300 bgs, Atlantic Raw Materials, Genoa
ALUMINUM SULFATE—441 bgs, Industrial Chemical & Dye Co, Rotterdam
AMINOPYRINE—2 dms, Havre
AMMONIUM CARBONATE—280 cs, American Agricultural Chemical Co, Glasgow
AMMONIUM CHLORIDE—300 bgs, Chemical Manufacturing Co, Liverpool
AMMONIUM PERSULFATE—100 dms, Mohegan International Inc, Rotterdam
AMYRIS OIL—5 dms, Lo Curto & Funk, Miragoane
ANILINE DYES—10 dms, Putnam Chemical Corp, Hamburg
51 cms, H Bruckmann & Lorbacher, Bremen
21 dms, Sandoz Inc, Havre
17 dms, Carbic Hoechst Corp, Rotterdam
19 dms, Heemsoth Kerner, Liverpool
10 dms, L & R Organic Products Co, Rotterdam
ANIMAL CHARCOAL—1,000 bgs, American Sugar Refining Co, Glasgow
ANTIMONY OXIDE—214 bgs, National Lead Co, Hull
135 bgs, C Gitlan, Antwerp
400 bgs, Antwerp
ANTIMONY REGULUS—77 cs, Rijeka
ARROWROOT—3,000 bgs, Morningstar Paisley Inc, St Vincent
ARSENIC—99 bbls, L J Buck, Gothenburg
38 dms, Overseas Metal & Ore Corp, Gothenburg
ARSENIC TRIOXIDE—293 dms, American Firstone Corp, Marseille
ASCORBIC ACID—24 dms, Byron Chemical Co, Kobe
BARBASCO POWDER—200 bgs, Astoria Panamericana, Iquitos
BARIUM SULFATE—337 cs, Picker X-Ray Corp, London
BAY OIL—2 dms, Ungerer & Co, Dominica
BEESWAX—25 bgs, Machado & Co, Puerto Plata
57 bgs, Marine Midland Trust Co, Puerto Barrios
23 bgs, R B Willson & Co, Puerto Barrios
123 bgs, S Zeitlins Sons, Paranagua
75 bgs, Monitz Wallack & Colodney, Havana
38 bgs, Transatlantic Animal By Products Corp, Santos
61 bgs, Puerto Plata
BENZOSULFIMIDE—30 dms, Chemical Bank, Yokohama
BLEACHING POWDER—150 dms, Chemical Manufacturing Co, Liverpool
BOIS DE ROSE OIL—10 dms, Gillespie & Co, Iquitos
35 dms, Lo Curto & Funk, Manaus
54 dms, Solbern Representations, Iquitos
BONEMEAL—1,019 bgs, Velleman Corp, Buenos Aires
CALCIUM CARBONATE—1,200 bgs, Pluess Staufer, Antwerp
1,000 bgs, Smith Chemical & Color Co, Hull
400 bgs, Hammill & Gillespie, Hull
CALCIUM CARBONATE, PRECIPITATED—300 bgs, H. J. Baker & Bro, Liverpool
CALCIUM CYCLAMATE—2 dms, Chemical Bank, Yokohama
20 dms, D Hauser, Kobe
CALCIUM NITRATE—500 bgs, McKesson & Robbins, Oslo
CAMPHOR OIL—6 dms, George Uhe Co, Keelung
15 dms, D W Hutchinson & Co, Yokohama
20 dms, Magnus Mabee & Reynard, Yokohama
CANANGA OIL—4 dms, Polak Frutal Works, Singapore
CARAWAY OIL—11 dms, Flora Essential Oils Co, Gdynia
CARAWAY SEED—400 bgs, Louis Furth, Rotterdam
200 bgs, Levy & Levis Co, Rotterdam
200 bgs, C M Van Sillevoldt, Rotterdam
100 bgs, Rotterdam
CARBON ACTIVATED—10 bgs, Tragacanth Importing Corp, Rotterdam
CARBON, DECOLORIZING—120 dms, American Cyanamid Co, Bremen
CARBON TETRACHLORIDE—50 dms, Genoa
CARDAMOM—30 cs, Wm E Martin & Son, Puerto Barrios
CARNAUBA WAX—211 bgs, N American Cocoa Trading Co, Salador
67 bgs, M Schmidt, Salvador
376 bgs, Smith & Nichols, Parnahyba
539 bgs, Cornelius Wax Refining Corp, Parnahyba
183 bgs, Strahl & Pitsch, Parnahyba
145 bgs, Frank B Ross, Parnahyba
313 bgs, F Henjes, Parnahyba
500 bgs, M Argueso & Co, Parnahyba
406 bgs, Bank of N Y, Tutoia
376 bgs, National City Bank, Tutoia
313 bgs, Irving Trust Co, Tutoia
167 bgs, M Hassel & Co, Fortaleza
111 bgs, M Argueso & Co, Fortaleza
210 bgs, Smith & Nichols, Fortaleza
111 bgs, Frank B Ross, Fortaleza
112 bgs, Hollander Trading Corp, Fortaleza
112 bgs, J W Hanson & Co, Fortaleza
250 bgs, Latina Trading Corp, Salvador
67 bgs, M Hassel & Co, Salvador
33 bgs, Cornelius Wax Refining Corp, Fortaleza
175 bgs, Paramaribo
112 bgs, Fortaleza
125 bgs, Parnahyba
CASEIN—3,200 bgs, A J Mills & Co, Auckland
1,180 bgs, L N White & Co, Buenos Aires
150 bgs, First Spice Co, Rotterdam
1,000 bgs, W L Willner Co, Buenos Aires
1,000 bgs, Crawford Kish & Co, Gdynia
500 bgs, Buenos Aires
CASHEWNUT SHELL LIQUID—240 tons, Mangalore
CASSIA—685 bls, L A Champon & Co, Tandjong Priok
91 bls, Ludwig Mueller, Rotterdam
170 bls, J F Frank, Rotterdam
930 bls, Rotterdam
CASTOR BEANS—1,341 bgs, Port Au Prince
588 bgs, Cap Haitien
1,369 bgs, Port de Paix
CASTOR OIL—485 tons, Baker Castor Oil Co, Bombay
278 tons, Wallace & Tiernan, Bombay
CELERY SEED—175 bgs, Louis Furth, Bombay
262 bgs, Otto Gerdau, Bombay
50 bgs, A G Dunn, Marseille
CETYL ALCOHOL—100 cs, Olympic Shipping Co, Liverpool
CHARCOAL, ACTIVATED—6 cs, L A Salomon & Bro, Rotterdam
CHESTNUT EXTRACT—2,200 bgs, Barkey Importing Co, Genoa
CHLORAL HYDRATE—40 kgs, Lo Curto & Funk, Liverpool
CHLORINATED RUBBER—500 bgs, C M C Chemicals Inc, Liverpool
CHLOROAMPHENICOL—15 dms, Parke Davis & Co, Genoa
CLAY, BALL—1,071 bgs, United Clay Mines Corp, Avonmouth
CLAY, CHINA—2,992 bgs, Anglo American Clays Corp, Avonmouth
COCA LEAVES—125 bls, Maywood Chemical Works, Salaverry
COCONUT OIL—400 tons, L A Ferm & Co, Rotterdam
250 tons, American Trust Co, Zamboanga
400 tons, Procter & Gamble Co, Colombo
400 tons, Manila
235 tons, Rotterdam
COD OIL—32 tons, Dyson Shipping Co, Reykjavik
CODLIVER OIL—50 dms, Arista Oil Products Corp, Alesund
10 dms, Arista Oil Products Corp, Reykjavik
COPAIBA BALSAM—8 dms, Hollander Trading Corp, Belam-Para
COPAL GUM—128 bgs, S Winterbourne & Co, Singapore
126 bgs, Wm H Scheel, Singapore
125 bgs, Rotterdam
CORIANDER OIL—33 cs, Kolon Trading Co, Antwerp
300 bgs, Casablanca
CORN OIL—225 tons, Corn Products Co, Rotterdam
CORN STARCH—1,990 bgs, Connell Rice & Sugar Co, Bremen
1,532 bgs, Rotterdam
650 bgs, Antwerp
CREAM OF TARTAR—1,250 bgs, Leonhardt & Brush, London
m-CRESOL—6 dms, Riches Nelson, Hamburg
CRESYLIC ACID—61 dms, Van Oppen & Co, Avonmouth
CUBE ROOT—928 bls, Meeton Trading Co, Iquitos
CUMIN SEED—171 bgs, Hismoco American Co, Bombay
294 bgs, Iran Pistachio Export Co, Khorramshahr
100 bgs, Am-Iran Corp, Khorramshahr
CURARE—12 cs, Astoria Pan Americana, Iquitos
CYANURIC CHLORIDE—250 dms, S American Minerals & Merchandise Corp, Yokohama
DAMMAR GUM—268 bgs, S Winterbourne & Co, Singapore
42 bgs, O G Innes Corp, Singapore
35 bgs, Gillespie Rogers Pyatt, Singapore
DEGRAS—50 dms, Manufacturers Trust Co, Antwerp
120 dms, Olympic Shipping Co, Liverpool
22 dms, Gerhard & Hey, Liverpool
DEXTRIN—100 bgs, Manufacturers Trust Co, Rotterdam
1,220 bgs, Morningstar Paisley Inc, Rotterdam
159 bgs, Stein Hall & Co, Rotterdam
400 bgs, Rotterdam
4,4-DIAMINOSTILBENE, 2,2 DISULFONIC ACID—10 dms, Liverpool
DICALCIUM PHOSPHATE—3,004 bgs, Wessel Duval & Co, Antwerp
DILL SEED—87 bgs, M J Golombeck, Bombay
82 bgs, H Marmorek & Son, Bombay
DIMETHYLUREA—68 dms, Philipp Bros, Chemicals, Bremen
123 dms, H Bruckmann & Lorbacher, Hamburg
75 dms, Orlex Dyes & Chemical Corp, Hamburg
20 dms, L & R Organic Products Co, Rotterdam
EARTH COLORS—216 dms, Baker Irons & Docksiader, Bremen
1,075 bgs, Naftone Inc, Bremen
EDIFAS-A—100 bgs, Chemical Manufacturing Co, Glasgow
ETHYLENE CHLOROHYDRIN—8 dms, London
EUCALYPTOL—25 dms, Seville
FENNEL SEED—80 bgs, F N S Forwarding Co, Rotterdam
93 bgs, Louis Furth, Piraeus
FISHLIVER OIL—45 dms, Wilbur Ellis Co, Yokohama
8 dms, Interocean Chemical & Minerals Corp, Yokohama
5 dms, Mitsubishi Corp, Yokohama
3 dms, Arista Oil Products Corp, Yokohama
10 dms, Kanematsu N Y Inc, Hamburg
3 dms, Arista Oil Products Corp, Rotterdam
FISH OIL RESIDUE—25 dms, Midland Western Inc, St Johns
GAMMA ACID—20 dms, Kaufman & Vinson, Kobe
GELATIN—500 bgs, T M Duche & Sons, Antwerp
40 bbls, Coignet Chemical Co, Antwerp
100 dms, Franco Belgian Corp, London
150 bgs, Manhattan Adhesives Corp, Hamburg
300 bgs, King Shipping Co, Rotterdam
111 dms, W Koepff, Hamburg
300 bgs, Transatlantic Animal By-Products Corp, Rotterdam
200 bgs, Transatlantic Animal By-Products Corp, Leghorn
188 dms, M Corbett, Marseille
60 dms, B Young, London
400 bgs, B Young, London
150 dms, Havre
GINGER—36 bgs, Van Loan & Co, Kingston
24 bgs, A G Dunn, Kingston
120 bgs, M J Golombeck, Kingston
GLUE, FISH—12 cs, Photo Engravers Chemical Supply Co, Glasgow
GLUMATIC ACID—4 dms, Globe Shipping Co, Antwerp
GLYCERINE—83 dms, R P Casado, Havana
GOLD BRONZE POWDER—10 dms, Leo Uhlfelder, Hamburg
GRAPHITE—600 bgs, Joseph Dixon Crucible Co, Bremen
1,000 bgs, Asbury Graphite Mills, Hong Kong
250 bgs, Joseph Dixon Crucible Co, Colombo
GUANIDINE NITRATE—20 dms, Terra Chemicals inc, Bremen
GUAR GUM—193 bgs, J L Quesada, Valencia
393 bgs, Stein Hall & Co, Karachi
1,500 bgs, Mitchel Beck, Karachi
200 bgs, T M Duche & Sons, Genoa
100 bgs, Wedeman & Kodknecht, Genoa
GYPSUM, CRUDE—10,295 tons, U S Gypsum Co, Hantsport
HEXAMETHYLENE—50 bbls, H A Gogarty, Antwerp
L-HISTIDINE MONOCHLORIDE—1 cs, Byron Chemical Co, Kobe
HYDROFLUORIC ACID—30 dms, Liverpool
HYDROXYCITRONELLAL—2 cns, Lo Curto & Funk, Rotterdam
10 dms, George Uhe Co, Marseille
IRISH MOSS—69 bls, Meer Corp, Dublin
IRON BLUE—83 dms, Van Oppen & Co, Liverpool
IRON OXIDE—92 dms, Hudson Shipping Co, Oslo
IRON POWDER—54 dms, H Bruckmann & Lorbacher, Rotterdam
JABORANDI LEAVES—82 bls, Manufacturers Trust Co, Tutoia
JAPAN WAX—32 cs, Mitsubishi Corp, Yokohama
JASMINE OIL—1 dm, Descollonges Inc, Rotterdam
KAMALA POWDER—33 bgs, Prentiss Drug & Chemical Co, Bombay
KARAYA GUM—314 bgs, Block Drug Co, Bombay
79 bgs, Meer Corp, Bombay
307 bgs, Jacques Wolf & Co, Bombay
308 bgs, Stein Hall & Co, Bombay
66 bgs, Morningstar Paisley Inc, Bombay
LACTIC ACID—20 cbys, Kolon Trading Co, Hamburg
LACTOSE—200 bgs, Mutchler Chemical Co, Rotterdam
15 dms, Mutchler Chemical Co, Rotterdam
20 dms, Industrial Chemical & Dye Co, Rotterdam
LAUREL LEAVES—84 bls, Izmir
LAUREL OIL—1 cs, Magnus Mabee & Reynard, Genoa
LAVANDIN OIL—30 dms, Tombarel Products Co, Cannes
3 cs, Coutin Associates, Marseille
LEMONGRASS OIL—10 dms, Lo Curto & Funk, Puerto Barrios
LIME OIL—2 dms, P H Petry, Port Au Prince
1 dm, Polarome Manufacturing Co, Port Au Prince
LOCUST BEANS—158 bgs, Meer Corp, Rijeka
LOCUST BEAN GUM—195 bgs, T M Duche & Sons, Rotterdam
910 bgs, J L Quesada, Valencia
440 bgs, T M Duche & Sons, Genoa
50 bgs, Nehls & O'Connell, Genoa
MACE—6 bgs, Rotterdam
MAGNESIUM CARBONATE—200 bgs, Reheis Co, Liverpool
45 cks, Lo Curto & Funk, Genoa
MANGROVE EXTRACT—800 bgs, Saxe Cutch Corp, Singapore
MARJORAM LEAVES—100 bls, M J Golombeck, Marseille
MENTHOL—60 cs, American Far Eastern Syndicate, Santos
15 cs, Lo Curto & Funk, Keelung
60 cs, George Uhe Co, Marseille
35 dms, Marseille
12 dms, Cannes
MERCURY—275 flks, Leghorn Trading Co, Leghorn
2-METHYLNAPHTHALENE—19 dms, G A Abood Co, Rotterdam
MOLASSES—555 tons, W R Grace & Co, Salaverry
MONOCHLOROACETIC ACID—735 dms, International Selling Corp, Marseille
52 dms, Bremen
MONOSODIUM GLUTAMATE—100 dms, Ajinomoto Co, Yokohama
NAPHTHALENE—901 bgs, J N Forker, Liverpool
399 bgs, J N Forker, Hull
NAPHTHOL—25 dms, Wedeman & Godknecht, Bremen
NUTMEG—200 bgs, National City Bank, Rotterdam
213 bgs, Lo Curto & Funk, Rotterdam
51 bgs, Dodge & Olcott, Tandjong Priok
OAKMOSS—101 bls, S B Penick & Co, Rijeka
10 cs, Centflor Manufacturing Co, Barcelona
OCOTEA CYMBARUM OIL—66 dms, Ernst Roth & Co, Itajai
50 dms, Lo Curto & Funk, Itajai
50 dms, American Metagraph Co, Itajai
OJEFICIN POWDER—15 dms, Astoria Panamericana, Iquitos
OLEUM ANTIOXIDANTS—2 bbls, S B Penick & Co, Rijeka
OLIVE OIL—450 dms, Bankers Trust Co, Seville
100 dms, Bank of America, Seville
50 dms, A N Cory, Seville
100 dms, Swiss Credit Bank, Seville
100 dms, Manufacturers Trust Co, Seville
100 dms, Atlantic Bank of N Y, Seville
50 dms, Chemical Bank, Seville
25 dms, American Trust Co, Seville
50 dms, Marine Midland Trust Co, Seville
50 dms, J Victori, Barcelona
25 dms, Old Monk Olive Oil Co, Marseille
ORANGE PEEL—359 bgs, Meer Corp, Cap Haitien
OURICURY WAX—111 bgs, M Argueso & Co, Salvador
PALMKERNEL OIL—510 cs, B M T Commodity Corp, Rotterdam
PAPRIKA—600 bgs, Meer Corp, Antwerp
PATCHOULI OIL—9 dms, Polarome Manufacturing Co, Singapore
2 dms, Florasynth Lab, Singapore
1 dm, Alpine Aromatics Inc, Singapore
PECTIN—90 dms, T M Duche & Sons, Copenhagen
PEPPER, BLACK—80 bgs, Daarnhower & Co, Alleppey
80 bgs, A G Dunn, Alleppey
PEPPER, RED—125 bgs, Mitsubishi Corp, Kobe
40 bgs, Hismoco American Co, Kobe
PERCHLOROETHYLENE—267 dms, International Selling Corp, Marseille
PERU BALSAM—4 dms, J M Rodriguez & Co, Corinto
PHENATHRENE—1 dm, Terra Chemicals Inc, Rotterdam
PHOSPHORUS, RED—50 cs, Bremen
PINE OIL—4 cs, International Flavors & Fragrances Inc, Genoa
POLLACKLIVER OIL—350 dms, Peder Devold Oil Co, Yokohama
5 dms, Arista Oil Products Corp, Yokohama
50 dms, Wilbur Ellis Co, Yokohama
50 dms, Interocean Chemical & Minerals Corp, Yokohama
100 dms, Mitsubishi Corp, Yokohama
POLYVINYL CHLORIDE—230 cs, Robeco Chemicals Inc, Yokohama
POLYVINYL CHLORIDE RESIN—2,000 bgs, Mitsubishi Corp, Yokohama
POPPYSEED—300 bgs, Rotterdam
800 bgs, Izmir
POTASSIUM CHROME ALUM—224 bgs, J H Lowenstein & Son, Manchester
POTASSIUM CYANIDE—100 dms, Chemical Manufacturing Co, Liverpool
POTASSIUM FERROCYANIDE—500 bgs, Haras Co, Rotterdam
POTASSIUM PERCHLORATE—100 dms, Ugine Industries, Havre
PSYLLIUM SEED—130 bgs, S B Penick & Co, Bombay
PSYLLIUM SEED, HUSKS—300 bgs, S B Penick & Co, Bombay
337 bgs, Parke Davis & Co, Bombay
365 bgs, Bemo Shipping Co, Bombay
QUEBRACHO EXTRACT—533 bgs, Tanimex Corp, Buenos Aires
4,163 bgs, American Tanners Ltd, Buenos Aires
5,600 bgs, Barkey Importing Co, Buenos Aires
QUINIDINE SULFATE—6 dms, Lo Curto & Funk, Hamburg
24 dms, Lo Curto & Funk, Hamburg
QUININE SULFATE—24 dms, Lo Curto & Funk, Hamburg
RAPE SEED—550 bgs, Hartz Mountain Products, Rotterdam
RAUWOLFIA SERPENTINA ROOT—125 bgs, Meer Corp, Bangkok
RICE STARCH—200 bgs, Morningstar Paisley Inc, Antwerp
ROSEMARY LEAVES—200 bls, Split
SANDALWOOD—100 bgs, National City Bank, Bombay
39 bgs, Meer Corp, Bombay
SANDALWOOD OIL—5 cs, Polarome Manufacturing Co, Cochin
7 cs, Roure-Dupont Inc, Cochin
7 cs, Lo Curto & Funk, Bombay
SAPONIN—10 dms, Karr Ellis, Liverpool
SASSAFRAS OIL—85 dms, Wm H Muller, Rotterdam
SESAME OIL—131 dms, I R Boody & Co, Copenhagen
SESAME SEED—560 bgs, A Sahadi & Co, Puerto Barrios
252 bgs, A Sahadi & Co, Corinto
SESAME SEED, HULLED—250 bgs, Levy & Levis Co, Corinto
550 bgs, W R Grace & Co, Corinto
100 bgs, Hismoco American Co, Corinto
200 bgs, C M Van Sillevoldt, Corinto
200 bgs, Archibald & Kendall, Corinto
900 bgs, Louis Furth, Corinto
100 bgs, A Sahadi & Co, Piraeus
SHELLAC—176 bgs, F H Paul & Stein Bros, Rotterdam
290 bgs, National City Bank, Hamburg
SODA, CAUSTIC—198 dms, B T Chemco Inc, Gothenburg
SODIUM ALGINATE—50 dms, Stein Hall & Co, Glasgow
SODIUM ALUMINATE—400 bgs, Chemical Manufacturing Co, Liverpool
SODIUM AZIDE—22 bbls, Lo Curto & Funk, Bremen
SODIUM BICARBONATE—700 bgs, Chemical Manfacturing Co, Liverpool
SODIUM CARBONATE MONOHYDRATE—43 bgs, Chemical Manufacturing Co, Liverpool
SODIUM CYANIDE—600 dms, Chemical Manufacturing Co, Liverpool
125 dms, Ugine Industries, Havre
SODIUM CYCLAMATE—10 dms, Chemical Bank, Yokohama
SODIUM GLUTAMATE—400 dms, International Mineral & Chemical Corp, Havre
SODIUM PERBORATE TETRAHYDRATE—800 bgs, Chemical Manufacturing Co, Liverpool
220 bgs, Philipp Bros Chemicals, Bremen
500 bgs, Lo Curto & Funk, London
SODIUM SILICOFLUORIDE—300 bgs, Riches Nelson, Rotterdam
SOLVENT-N—100 dms, Chemical Manufacturing Co, Liverpool
STARCH—720 bgs, Morningstar Paisley Inc, Rotterdam
STYRAX—9 cs, Swiss Credit Bank, Istanbul
SULFAMIC ACID—250 bgs, Wedeman & Godknecht, Rotterdam
TAMARINDS—20 bbls, Malko Bros, St Johns
TAPIOCA FLOUR—3,650 bgs, Manhattan Adhesives Corp, Itajai
600 bgs, American Key Products, Itajai
1,102 bgs, Stein Hall & Co, Itajai
110 bgs, Morningstar Paisley Inc, Itajai
1,120 bgs, H Dolan Jr, Kohsichang
400 bgs, Geismar & Co, Kohsichang
6,720 bgs, Morningstar Paisley Inc, Bangkok
1,720 bgs, Bangkok
TARTARIC ACID—50 bgs, Frank Samuel & Co, Marseille
THEOPHYLLINE—15 dms, Kolon Trading Co, Rotterdam
THYROID POWDER—13 dms, Hudson Pharmacal Co, Copenhagen
TITANIUM DIOXIDE—80 bgs, American Enka Corp, Rotterdam
TITANIUM DIOXIDE, ANATASE—3,307 bgs, Marubeni Iida Co, Yokohama
TOLU BALSAM—5 dms, Meer Corp, La Libertad
5 dms, Polarome Manufacturing Co, La Libertad
TRAGACANTH GUM—174 bgs, Am-Iran Corp, Khorramshahr
15 cs, S B Penick & Co, London
50 bgs, Khorramshahr
TRICHLOROETHYLENE—500 dms, International Selling Corp, Marseille
TUNG OIL—350 tons, Bunge Corp, Buenos Aires
399 tons, Pacific Vegetable Oil Corp, Buenos Aires
TURMERIC—80 bgs, Alleppey

ULTRAMARINE BLUE—378 bgs, Whittaker Clark & Daniels, Hull
UREA—1,989 bgs, Chemical Manufacturing Co, Liverpool
VANILLA—40 dms, Zink & Trieste, Marseille
VETIVER OIL—1 dm, A Verley & Co, Port Au Prince
WAX—240 bgs, Hostawax Co, Bremerhaven
90 bgs, A Fahner, Hamburg
20 bbls, Heka Imports & Exports, Hamburg
WOOL ALCOHOLS—60 cs, Traders Service Corp, Liverpool
m-XYLOL—2 dms, Karr Ellis, Hamburg
ZEDOU GUM—4 bgs, Hamburg
ZINC OXIDE—200 bgs, C B Chrystal Co, Marseille
600 bgs, Marseille
ZINC YELLOW—200 bgs, Reveili Chemical Co, Antwerp

Los Angeles

CARNAUBA WAX—66 bgs, Dura Commodities Corp, Hamburg
CASSIA—125 bls, H M Newhall & Co, Saigon
COPRA—500 tons, Paul X Smith, Iloilo
800 tons, Procter & Gamble Co, Cebu
500 tons, Cargill Inc, Manila
500 tons, Cargill Inc, Davao
200 tons, Procter & Gamble Co, Nasipit
1,000 tons, American Trust Co, Zamboanga
500 tons, Procter & Gamble Co, Cagayan de Oro
1,500 tons, American Trust Co, Cebu
COPRA CAKE—5,599 bgs, P K Smith, Zamboanga
4,280 bgs, Procter & Gamble Co, Manila
CUMIN SEED—280 bgs, W L Willner Co, Hong Kong
EARTH COLORS—900 bgs, Naftone Inc, Bremen
400 bgs, F D Davis Co, Bremen
KELP—178 bgs, Capetown
MINERAL WAX—100 bgs, Hamburg
NAPHTHA—11,974 bbls, Powerline Oil Co, Aruba
PEPPER, BLACK—160 bgs, California Commodities Corp, Hong Kong
140 bgs, Singapore
PEPPER, RED—100 bgs, Pan Asiatic Trading Co, Kobe
1,600 bgs, Citizens National Bank, Bangkok
PEPPERMINT LEAVES—23 cs, Hathaway Allied Products, Hamburg
SHELLAC—50 Lgs, Calcutta

Philadelphia

BONE—1,134 bgs, Manufacturers Trust Co, Buenos Aires
CASEIN—2,000 bgs, National Casein Co, Buenos Aires
CHESTNUT EXTRACT—1,500 bgs, Barkey Importing Co, Genoa
500 bgs, Marseille
CORN STARCH—300 bgs, Manhattan Adhesives Corp, Rotterdam
CUTTLEFISH BONE—52 cs, Phila Seed Co, Bordeaux
DICALCIUM PHOSPHATE—164 bgs, J H Schroder, Antwerp
GYPSUM, CRUDE—7,046 tons, U S Gypsum Co, Hantsport
IODINE, CRUDE—60 kgs, J H Faunce, Yokohama
MENTHOL—50 cs, Schwabach & Co, Santos
MOLASSES—2,997,856 gals, Publicker Co, Sagua 3,033,561 gals, Manati
NAPHTHALENE—282,917 gals, Industrial Solvents Corp, Toronto
OLIVE OIL—50 dms, La Rosa & Son, Barcelona
PAPRIKA—150 bgs, Seville
POTASSIUM CYANIDE—100 dms, Ugine Industries, Havre
SODIUM SILICO FLUORIDE—600 bgs, Riches Nelson, Rotterdam
TAPIOCA FLOUR—5,600 bgs, Itajal

San Francisco

AMMONIUM CHLORIDE—300 bgs, C M C Chemicals, Liverpool
CASEIN—200 bgs, Borden Co, Buenos Aires
200 bgs, First Spice Co, Amsterdam
CREAM OF TARTAR—60 cs, Wheeler & Miller, Amsterdam
GELATIN—35 bbls, Coignet Chemical Co, Antwerp
GINGER—56 bgs, McCormick & Co, Cristobal
MACE—10 cs, Mac Albert Co, Singapore
30 cs, Singapore
MAGNESITE—400 bgs, Smith Chemical & Color Co, Rotterdam
PEPPER, BLACK—420 bgs, Singapore
SODIUM BICARBONATE—397 bgs, C M C Chemicals, Liverpool
300 bgs, C M C Chemicals, Manchester
SULFAMETHZINE—2 dms, P W Bellingall, Hamburg
TANKAGE—399 bgs, Internatonal Packers Ltd, Buenos Aires
TAPIOCA FLOUR—100 bgs, Morningstar Paisley Inc, Bangkok
5,970 bgs, H M Newhall & Co, Kohsichang
3,270 bgs, Sterling International, Kohsichang
TUMERIC—160 bgs, Waterman Corp, Kobe
160 bgs, Kellys America Ltd, Kobe
80 bgs, Wm E Martin & Son, Kobe
ZINC CYANIDE—25 dms, C M C Chemicals, Manchester

Are You Looking For A New Source?

Glutamic Acid 99-100%

Glutamic Acid Hydrochloride N. F.

Mono-Sodium Glutamate

Calcium Glutamate

Magnesium Glutamate

We have been supplying glutamates for the past 15 years. If you need quantity, quality or special salts like calcium or magnesium glutamate write or call . . . .

B. L. Lemke & Co., Inc.
Manufacturing Chemists
LODI, NEW JERSEY

MCA Elects Officers; Wyandotte, Bower Cited

Manufacturing Chemists Association has elected Howard S. Bunn of Union Carbide Corporation, New York, as chairman of its executive committee. He succeeds David H. Dawson of E. I. duPont de Nemours & Co.

John E. Hull has been re-elected full time president and a director. Elected vice-presidents are J. Robert Fisher, of Gamma Chemical Corporation, New York, and Dr. W. G. Malcolm, president of American Cyanamid Company, New York. M. M. Crass, jr., has been re-elected full time secretary-treasurer.

The association picked a slate of twelve new directors at its annual meeting in White Sulphur Springs, West Va., last week. Two for terms of one year, one for a term of two years, and nine to serve three-year terms expiring May 31, 1963.

A feature of the meeting was the award of safety citations. Highest honors in this field went to Wyandotte Chemical Corporation, Wyandotte, Mich., and Henry Bower Chemical Manufacturing Company, Philadelphia, Pa.

Each received the Lammot duPont Safety Award—Wyandotte representing firms with more than two million man-hours of work time annually, and Bower representing companies with fewer.

R. C. McCurdy, president of Shell Chemical Comapny, is the new chairman of the MCA board (picture story on page 7 of this issue).

Starch Pilot Plant Running At Staley's Decatur Factory

A pilot plant facility to speed development of modified starch products for the paper, textile and other industries has been put in operation by A. E. Staley Manufacturing Company at Decatur, Ill.

A miniature starch processing plant, built in detail of full-size production equipment, the new pilot facility develops process data on research laboratory findings and produces semi-commercial quantities of new starch products for market development use. It can produce 12,000 pounds a day.

Hooker Phenol Plant

—*Continued from page 3*

tionating plant just completed at Siloam, Ky., by Columbia Hydrocarbon, a subsidiary of Columbia Gas System, Inc.

Hooker's Durez Plastics Division will operate the new phenol installation. A new process—the outgrowth of research work on the Raschig process which Hooker now uses as its North Tonawanda facility—will be used.

Hooker makes it clear that it has other materials besides phenol in mind for the Kentucky property and, in fact, says that these additional ventures are already "in the preliminary planning stage."

While the company is not yet ready to announce what chemical raw materials are involved in this further expansion move, Hooker officials provided a clue at a security analysts meeting in February. At that time, it was stated that the concern means to integrate backward.

Besides phenol, this would indicate expansions in such materials as benzene and methanol.

Durez Has Large Captive Use

Hooker points out that its Durez division has a large and growing captive use for phenol at North Tonawanda and at its highly automated molding compounds plant at Kenton, Ohio, about 150 miles from South Shore.

Durez lays claim to being the world's largest producer of phenolic molding compounds. It is also one of the largest makers of phenolic resins.

A 50-million-pound phenol plant—and that, say trade observers, is what chemical economics dictate—means that Hooker will probably merchant some of its Kentucky South Shore output.

Beyond phenolic resins, whose growth rate is good but not spectacular, Hooker is believed to be eyeing such materials as alkyl phenols.

Goodyear to Spend

—*Continued from page 5*

vic AO"—are extensively used in knife, dip and roller coating applications as well as roto-cast and slush molding operations for a wide variety of end products, Goodyear reports.

The expansion is being undertaken at Niagara Falls to meet the ever increasing demand for "Pliovic" vinyl resins, particularly the specialty resins.

The additional facilities, part of Goodyear's overall $90 million capital expenditure program for 1960, are expected to be in production by early fall of this year.

gane's

PHENYLEPHRINE, HCL

FINE MEDICINAL CHEMICALS

Alphenal	Allylbarbituric Acid
Amobarbital	Aprobarbital
Barbital	Butabarbital
Pentobarbital	Mephobarbital
Phenobarbital	Secobarbital

Diallylbarbituric Acid

also, the SALTS and OTHERS

WITH EVERY POUND . . . MORE GANE'S *in* QUALITY

Manufacturer of Fine Medicinal Chemicals Since 1929

GANE'S CHEMICAL WORKS, INC.

535 Fifth Avenue, New York 17, N. Y. • Yukon 6-5780

Quality in Quantity

HYDROCORTISONE ACETATE or ALCOHOL U.S.P.

NEOMYCIN SULFATE U.S.P. or Commercial Grade

FOLIC ACID U.S.P.

The pharmacologic know-how and rigid quality controls of The Upjohn Company assure you highest standards of pharmaceutical purity in bulk chemicals—whether in laboratory or mass-production quantities. Whether your needs are minute or monumental, Upjohn can fill your order today.

Upjohn Write or phone (collect) CHEMICAL SALES DIVISION
THE UPJOHN COMPANY • KALAMAZOO, MICH.

←**YOUR CROWN OF QUALITY**

All-Valencia orange oil! Not a blend, but *all* Valencia, with that true, rich Valencia flavor. Valencia Orange Oil, Florida Cold Pressed, U.S.P.; California Cold Pressed, U.S.P.

You get a TRIPLE GUARANTEE

with Minute Maid's Sunfilled® Brand Orange and Lemon Oils

YOUR CROWN OF QUALITY

Highest quality California Lemon Oil, Cold Pressed, U.S.P., made from a skillful blend of the best California lemons.

Available in 35-lb. tins, and 100-, 200-, and 385-lb. drums.

Guaranteed purity!

You know that "Sunfilled" essential oils are 100% pure — without any adulteration — because they are produced and packed under continuous inspection of the U.S. Department of Agriculture. They come to you protected by the tamper-proof seals you see at left.

Guaranteed supply!

As America's largest supplier of citrus products, Minute Maid provides an ample, assured, dependable source for all your citrus oil requirements. Minute Maid is the only supplier offering a complete line of both Florida and California citrus oils — all-Valencia Florida or California orange oil and California lemon oil, all Cold Pressed, U.S.P.; Cold Pressed Florida or California grapefruit oil; also tangerine and lime oil, Cold Pressed.

Guaranteed quality!

Only the highest quality oils carry the "Sunfilled" brand. Lesser quality oils are sold unbranded at lower cost. When you buy "Sunfilled", you buy the very best. Starting right now, don't be satisfied with *less* than "Sunfilled!"

CITRUS PRODUCTS DIVISION
MINUTE MAID CORPORATION
Orlando, Florida
New York, N.Y.: 420 Lexington Avenue • ORegon 9-8755

Essential Oils, Aromatics

Two reductions and one advance in the essential oils and one reduction in the aromatic chemicals were reported by dealers in the New York area. Peruvian bois de rose declined 5 cents per pound, Ceylon citronella declined 10 cents per pound, sandalwood advanced 75 cents per pound and terpinyl propionate declined 5 cents per pound. Oils reported to be weakening, though showing no spot price reduction, are clove leaf, lavender flower and orange. Petitgrain was reported to be strengthening as was tangerine.

With the scent of lilac still fresh in the minds of flower lovers who are also in the perfume business, now is an appropriate time for the reminder that there is no such thing as absolute lilac oil.

Efforts have been made over the years to capture the scent of the lilac, but all of them without success, according to Dr. Ernest Guenther.

One such attempt has been described as producing, not only a most disagreeable odor, but one that was far remote from that of a living flower.

The lilac type of aroma is so popular, however, that substitutes have been devised—many of which reproduce the natural scent quite accurately.

Among the substances that commonly go into a lilac perfume are hydroxycitronellal, terpineol, cinnamic alcohol, anisic alcohol, phenyl ethyl alcohol, hydratropic alcohol, indole, isoeugenol, oil of styrax, linalool, benzyl acetate.

Also benzyl propionate, cuminketone, ylang ylang, totyl alcohol, amyl salicylate, benzyl alcohol, benzyl salicylate, paracresyl acetate, paracresyl methyl ether, ionone and amyl-cinnamic aldehyde.

In a paper recently published in a German cosmetic, drug and perfume journal, Harry Voisin says that the lilac perfumes are especially suitable for masking unpleasant odors in such places as hospitals and as additives to industrial products.

He says that so much masking of odors with lilac-type aromas has almost come to mean that the presence of lilac indicates a hidden unpleasant element in the air. Despite this, however, the scent remains a popular one.

Price Trends

Advanced

Sandalwood, 75c. per lb.

Reduced

Bois de rose, Peruvian, 5c. per lb.
Citronella, Ceylon, 10c. per lb.
Terpinyl propionate, 5c. per lb.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	June 12, 1959
145.48	145.45	145.50	145.42

For Current Prices see Page 10

Essential Oils

Bois de Rose—Material from Peru is declining further in price. From its previously quoted low $1.85 per pound, it has been reduced to $1.80 per pound. Brazilian material remains at its previously quoted level, $2.20 per pound.

Brazilian material, however, is likely to decline once the Amazon River and its tributaries flood and the logs are floated down to the distilleries. This flooding usually takes place in mid-June.

Chenopodium—This oil, which has been in use since the days of the War Between the States, is said to be losing popularity. Growers report that the current crop is suffering with some sort of blight, but that demand is so slow that this set-back will barely be felt. Formerly popular as an anthelmintic, wormseed oil is losing out to the modern drugs such as the piperazine salts.

The flowering and fruiting plant grows wild in the eastern and southern parts of the United States. In Maryland, however, it is cultivated. The powerful, offensive odor is present in the glandular hairs of the seeds, stems and leaves.

In the early days of its production, it was sold chiefly in Baltimore and for this reason it used to be known as Baltimore oil.

The crop is usually harvested by hand. After being cut, with small axes or hoes, the plants are left in the fields to dry. Depending on the weather, this takes from a few days to a week. One acre of chenopodium produces about three tons of dried plant material.

When the material is fully dried, it is hauled to the distilleries. The oil is a colorless to yellowish liquid with a camphoraceous odor which many persons find quite unpleasant. The flavor of the oil is bitter and gives one a burning sensation.

Imports Detained at N. Y.

Week Ended June 3, 1960

Black pepper, 2 lots, 160 bags.
Caraway seeds, 2 lots, 150 bags.
Cassia, 32 lots, 3,010 bales.
Chillies, 234 bags.
Coriander seed, 300 bags.
Cumin seed, 2 lots, 335 bags.
Ginger, 86 bags.
Mace, 4 lots, 71 cases.
Nutmegs, 9 lots, 828 bags.

Cananga—Native material continues to sell for $5 per pound, according to essential oil dealers in the New York area.

It is interesting to note that, at one time, it was generally believed that both cananga and ylang ylang oils were derived from the same tree.

In the 1930's a man named Koolhaas planted seeds of the ylang ylang in Java which he had had imported from the Philippine Islands. When the trees were grown, he compared them with the cananga and found that the ylang ylang tree grew only to about half the size of the cananga tree.

The leaves of the ylang ylang tree were smaller than the leaves of the cananga tree and the oils distilled from the two trees were markedly different.

Ylang ylang oil possessed a much finer odor than the cananga, even when ylang ylang was grown on Java soil.

Cananga oil is used when a manufacturer wants the ylang ylang aroma but cannot afford to pay for it. Cananga is a harsher odor than ylang ylang, but it is usually longer lasting.

Citronella — Material from Ceylon dropped in price last week from $1.20 per pound to $1.10 per pound. Java-type material continues at 85c. per pound.

Geranium—Still there has been no weakening in this market. Prices are higher many essential oil dealers say than they can remember them ever being. Someone said some of the extra grade oil was selling for as much as $30 per pound.

The OPD listings for the regular grades continue at their previous levels: Algerian, $20 per pound and Bourbon, $22 per pound.

Lavender—Dealers report that the lavender flower markets are weakening. The OPD prices, however, remain at their previously quoted levels: 35-37 percent ester, $1.85; 40-42 percent ester, $5 per pound, and Spanish spike, $2.20 per pound.

Lemongrass—The low of the range remains at $2 per pound. Prices at source and on spot have been fluctuating rapidly during the past three weeks, but the $2 per pound price continues to be accurate.

It was reported that dealers stocks were low when the new, cheaper crop became available and that there was so much buying interest that the material advanced in prices. Buying sloughed off a bit and the price went back down.

Orange—The overall orange market is said to be weakening, according to reports from essential oil dealers. Prices continue at their previously quoted levels, however: California sweet distilled, 60c. per pound; Florida sweet distilled, 35c. per pound; California expressed, 70c. per pound; Florida expressed, 45c. per pound; Messina, $3.25 per pound, and West Indian bitter, 2.50 per pound.

Petitgrain—Shipping prices are reported to be up, according to reports from the essential oil dealers here in the New York area. No affect of this has yet been seen on spot, it was said.

The low of the OPD range continues at $4.50 per pound. This is for old crop material, dealers report. When the new crop material comes in, dealers speculate that prices on spot will rise.

This price, of course, refers to the material from Paraguay. The highest quality oil, however, comes from Southern France and other countries bordering on

—*Continued on page 66*

PUT THIS POWERFUL URGE TO BUY IN YOUR AEROSOLS

In MM&R's enlarged, modern aerosol laboratory new perfume oils are being created constantly to keep abreast with rapid advances and to meet specific requirements of our customers in increasing the salability of their pressurized products.

Write for full information.

MAGNUS, MABEE & REYNARD, INC.

The World's Most Famous Supplier of Essential Oils, Basic Perfume Oils, and Concentrated Flavors

16 DESBROSSES STREET • NEW YORK 13, N.Y.

A SYMBOL OF QUALITY FOR SEVENTY-FIVE YEARS

- OIL CARDAMOM
- OIL CASCARILLA
- OIL CELERY
- OIL OLIBANUM
- OIL OPOPONAX
- OIL ORRIS

GEORGE LUEDERS & CO., Incorporated
ESTABLISHED 1885
427-429 Washington Street, New York 13, N. Y.
CHICAGO • SAN FRANCISCO • MONTREAL
Factory: Patchogue, Long Island
Representatives: Waukesha, Wis., Shreveport, La., Old Saybrook, Conn., Toronto

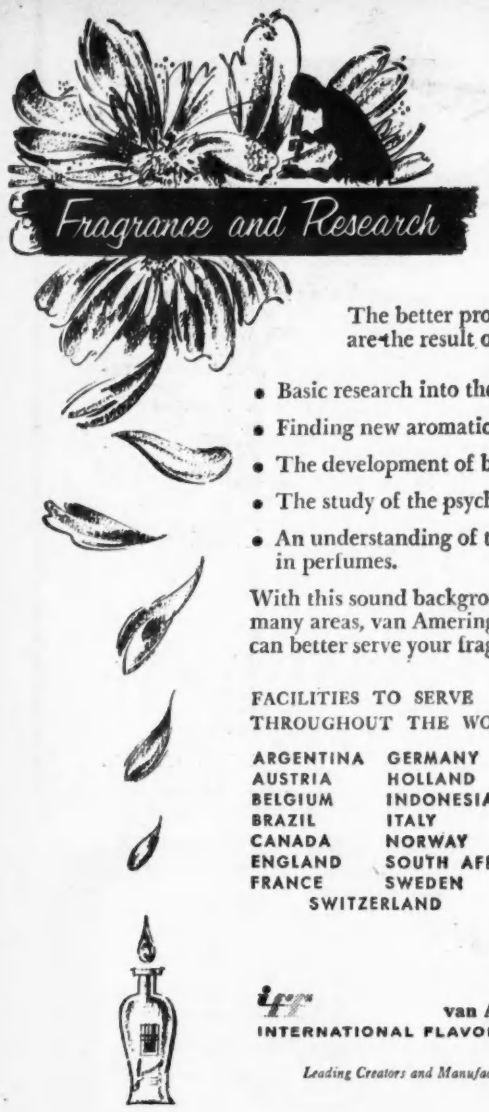
AEROSOL BOUQUETS · FLAVORING EXTRACTS · MASKING ODORS for INDUSTRIAL PURPOSES
by Florasynth LABORATORIES, INC.
900 Van Nest Ave., New York 62, N. Y.
Chicago 6, Los Angeles 21, and other principal cities in the U.S., Canada and Mexico

ESSENTIAL OILS • PERFUME OILS • FLAVORS • AROMATIC CHEMICALS and ODOR MASKS
Proven Replacements For: BERGAMOT OIL, CITRONELLA OIL, ANISE OIL, CASSIA OIL
DOMESTIC EXPORT — YOUR INQUIRIES SOLICITED
D. W. HUTCHINSON & CO., INC., 700 South Columbus Ave., Mount Vernon, N. Y.
Founded 1896 — Telephone: Mount Vernon 4-7272

THEY'RE THE SPICE OF LIFE . . .

FRITZSCHE'S Spice Oils, Oleoresins and Spice Oil Mixtures—specially prepared to accentuate the delectability and zest of those food products for which they're intended—may be ordered at any season and in any quantity with positive assurance that every lot delivered will be of the same high standard and fine uniform quality. Constant rigid control and bulking of selected grades enable us to make this unqualified guarantee.

FRITZSCHE Brothers, Inc. Established 1871
PORT AUTHORITY BUILDING, 76 NINTH AVENUE, NEW YORK 11, N. Y.
BRANCH OFFICES and *STOCKS: Atlanta, Ga., Boston, Mass., *Chicago, Ill., Cincinnati, Ohio, Greensboro, N. C., *Los Angeles, Cal., Philadelphia, Pa., San Francisco, Cal., St. Louis, Mo., Montreal and *Toronto, Canada; *Mexico, D. F. and *Buenos Aires, Argentina. FACTORIES: Clifton, N. J. and Buenos Aires, Argentina.



Fragrance and Research

The better product fragrances of today are the result of extensive research...

- Basic research into the sources of natural fragrance.
- Finding new aromatic materials.
- The development of better processing methods.
- The study of the psychology of scent.
- An understanding of trends and preferences in perfumes.

With this sound background of broad research in many areas, van Ameringen-Haebler can better serve your fragrance needs.

FACILITIES TO SERVE THROUGHOUT THE WORLD

ARGENTINA, AUSTRIA, BELGIUM, BRAZIL, CANADA, ENGLAND, FRANCE, GERMANY, HOLLAND, INDONESIA, ITALY, NORWAY, SOUTH AFRICA, SWEDEN, SWITZERLAND

Alva FLAVORS

for basic good taste in pharmaceuticals and foods.

IFF van Ameringen-Haebler division
INTERNATIONAL FLAVORS & FRAGRANCES INC.
521 West 57th St. • New York 19, N. Y.

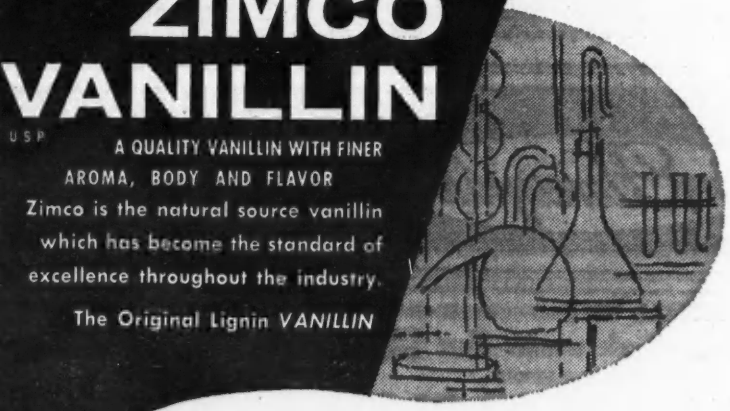
Leading Creators and Manufacturers in the World of Fragrance

ZIMCO® VANILLIN USP

A QUALITY VANILLIN WITH FINER AROMA, BODY AND FLAVOR

Zimco is the natural source vanillin which has become the standard of excellence throughout the industry.

The Original Lignin *VANILLIN*



Specify

Parakeet®

BRAND OF

CERTIFIED FOOD COLORS

WORLD'S LARGEST SUPPLIERS OF VANILLIN

Sterwin Chemicals INC.
Subsidiary of Sterling Drug Inc.
1450 BROADWAY, NEW YORK 18, N. Y.
2020 GREENWOOD STREET, EVANSTON, ILL.
Branch Offices and Warehouses in Leading Cities

Chemical Men Read the Small Print

—*Continued from page 5*

Secretaries of the CRI and the commission.

Hearings will begin July 11 and will run simultaneously before both groups.

US participation in the upcoming GATT negotiations is under authority of the trade agreements extension law passed by congress in 1958, which continued the law in effect until June 30, 1962. The extension carried with it authority to reduce any tariff rate by 20 percent below the level existing on July 1, 1958, with not more than 10 percent of the reduction taking place in one year.

Of particular interest to coaltar products producers is other authority provided by the extension resolution permitting a reduction of any advalorem duty or its equivalent to 50 percent in cases where the duty exceeds this amount. A number of coaltar products fall in this category.

The GATT negotiations will be conducted in two phases.

The first begins in Geneva, Switzerland, in September and will have to do principally with establishment of a new schedule of tariff concessions for the Common Market as a whole to replace the present schedules for individual countries.

The second phase, which is of primary interest to the chemical industry, begins in January. At that time, the negotiations will have as their aim the reduction of tariffs and other charges on imports.

Following are the items along with their appropriate paragraph numbers:

1—Acetic acid; acetic anhydride; citric acid; lactic acid, containing by weight of lactic acid 55 percent or more; tartaric acid; acids and acid anhydrides not specially provided for (except barbituric acids, naphthenic acids, and stearic acid).

2—Acetaldehyde, aldol or acetaldol, aldehyde ammonia, butyraldehyde, crotonaldehyde, paracetaldehyde; ethylene chlorohydrin, propylene chlorohydrin, butylene chlorohydrin; ethylene dichloride, propylene dichloride, butylene dichloride; ethylene oxide, propylene oxide, butylene oxide; ethylene glycol, propylene glycol, butylene glycol, and all other glycols or dihydric alcohols; monoethanolamine, diethanolamine, triethanolamine, ethylene diamine, and all other hydroxy alkyl amines and alkylene diamines; allyl alcohol, crotonyl alcohol, vinyl alcohol, and all other olefin or unsaturated alcohols; homologues and polymers of all the foregoing; ethers, esters, salts and nitrogenous compounds of any of the foregoing, whether polymerized or unpolymerized; and mixtures in chief value of any one or more of the foregoing not specially provided for.

3—Acetone and ethyl methyl ketone, and their homologues, and acetone oil.

4—Alcohol: Amyl, hexyl, and propyl, all the foregoing whether primary, secondary, or tertiary; fusel oil; mixtures in chief value of any one or more of amyl alcohol, butyl alcohol, hexyl alcohol, propyl alcohol, or fusel oil; ethyl for nonbeverage purposes only.

5 and 23—All chemical elements, all chemical salts and compounds, all medicinal preparations, and all combinations and mixtures of any of the foregoing, all the foregoing obtained naturally or artificially, and not specially provided for, and whether or not in any form or container specified in paragraph 23, tariff act of 1930:

Ammonium compounds (except ammonium silicofluoride); barium compounds; beryllium oxide or carbonate; butyrolactone; calcium hypochlorite; chlorine; derivatives of barbituric acid; dicalcium phosphate; ergotamine tartrate; ergot derivatives; fatty alcohols and fatty acids, sulfated, and salts of sulfated fatty acids; germanium dioxide; germanium metal; magnesium salts and compounds; monosodium glutamate preparations; potash salts; products chiefly used as assistants in preparing or finishing textiles; salts derived from vegetable oils, animal oils, fish oils, animal fats or greases, or from fatty acids thereof; salts and compounds of gluconic acid and combinations and mixtures of any such salts or compounds; sodium compounds; 2-pyrrolidone; N-methyl-2-pyrrolidone; and vitamins.

6—Potassium aluminum sulfate or potash alum; ammonium aluminum sulfate or ammonia alum; aluminum sulfate; alum cake or aluminous cake; aluminum salts and compounds not specially provided for.

7—Ammonium carbonate and bicarbonate; and ammonium chloride.

8—Antimony: Oxide; tartar emetic or potassium-antimony tartrate; antimony salts and compounds not specially provided for (not including sulfides).

9—Cream of tartar.

10—Balsams: Copaiba, fir or Canada, Peru, styrax, and all other balsams (not including tolu), all the foregoing which are natural and uncompounded and not containing alcohol.

11—Synthetic resins not specially provided for: Acrylic, alkyd (nonbenzenoid), melamine, polyamide, polyethylene, polyfluoroethylene, rosin ester, silicone, and urea resins, mixtures of urea and melamine resins, and synthetic resins made in chief value from vinyl acetate.

12—Barium carbonate, precipitated; barium chloride; barium hydroxide; barium nitrate.

13—Blackings, powders, liquids, and creams for cleaning or polishing, not specially provided for, and not containing alcohol.

14—Bleaching powder or chlorinated lime.

15—Theobromine.

16—Calcium carbide.

17—Calomel, corrosive sublimate, and other mercurial preparations.

18—Carbon tetrachloride.

19—Casein or lactarene and mixtures of which casein or lactarene is the component material of chief value, not specially provided for.

20—Chalk or whiting or Paris white, precipitated.

21—Chemical compounds, mixtures, and salts, of which gold, platinum, rhodium, or silver constitutes the element of chief value.

22—Chemical compounds, salts, and mixtures of bismuth.

24—Medicinal compounds, preparations, mixtures and salts, containing over 50 percent of alcohol, flavoring extracts, and natural or synthetic fruit flavors, fruit esters, oils and essences, all the foregoing, and their combinations when containing more than 50 percent of alcohol; extracts (not including flavoring extracts) and their combinations when containing not over 20 percent of alcohol.

25—Chicle, refined or advanced in value by drying, straining, or any other process or treatment whatever beyond that essential to the proper packing.

26—Chloral hydrate, terpin hydrate, thymol, and glycerophosphoric acid, and salts and compounds of glycerophosphoric acid.

27 (a) (1), (5)—Alpha-naphthol; para-aminobenzoic acid; paraphenetidine; 1-aminoanthraquinone; anthraquinone; beta-naphthol not suitable for medicinal use; meta-dimethylaminophenol; metanilic acid; ortho-nitroaniline; para-nitroaniline; para-nitrotoluene; meta-phenylenediamine; ortho-phenylenediamine; N-phenyl-2-naphthylamine; phthalic anhydride quinaldine; ortho-toluenesulfonamide; toluene-2,4-diamine; 2,4-xylidine; anthracene having a purity of 30 percent or more; naphthalene which after the removal of all water present has a solidifying point of 79 degrees centigrade or above; all the foregoing products whether obtained, derived, or manufactured from coal tar or other source.

27(a)(3)(5)—All products, by whatever name known, which are similar to any of the products provided for in paragraph 27 or 1651, tariff act of 1930, and which are obtained, derived, or manufactured in whole or in part from any of the products provided for in either of such paragraphs:

2-Acetamido-3-chloroanthraquinone; orthoacetanisidide; ortho-acetoacetotoluidide; 2',4'-acetoacetoxylidide; adiponitrile; 3'-aminoacetophenone; 1-amino-5-benzamidoanthraquinone; 7-amino-1,3-naphthalenedisulfonic acid (including salts thereof); 5-amino-2-naphthalenesulfonic acid (including salts thereof); 8-amino-1-naphthalenesulfonic acid (including salts thereof); 8-amino-2-naphthalenesulfonic acid (including salts thereof); 8-amino-1-naphthol-3,6-disulfonic acid (including salts thereof); 6-amino-1-naphthol-3-sulfonic acid (including salts thereof); 8-amino-1-naphthol-5-sulfonic acid (including salts thereof); 4-amino-2-stilbenesulfonic acid (including salts thereof); 8-anilino-1-naphthalenesulfonic acid (including salts thereof); 6-anilino-1-naphthol-3-sulfonic acid (including salts thereof); ortho-anisidine; para-anisidine; benzazimide; biligrafin acid; caprolactam monomer; 1-chloroanthraquinone; 6-chloro-m-cresol [Oil — 1]; 4-chloro-2,5-dimethoxyaniline [NH$_2$ — 1]; cyclohexylamine; 3,5-diacetamido-2,4,8-triiodobenzoic acid; 1,5-diaminoanthraquinone; 4,4'-diamino-2,2'-stilbenedisulfonic acid (including salts thereof); meta-diethylaminophenol; 1,8-dihydroxy-4,5-dinitroanthraquinone; 6,7-dihydroxy-2-naphthalenesulfonic acid (including salts thereof); 2,4-dimethoxyaniline; 4,4'-dinitro-2,2'-stilbenedisulfonic acid; 3-ethylamino-para-cresol; gentisic acid; hexamethylene adipamide; para-hydroxybenzoic acid; 1-hydroxy-2-carbazolecarboxylic acid; 2-hydroxy-3-dibenzofurancarboxylic acid; 3-hydroxy-2-naphthoic acid; 1,1'-iminobis[4 benzamidoanthraquinone]; 1,1'-iminobis-(5-benzamidoanthraquinone); iminodianthraquinone; 5-methoxy-meta-phenylenediamine; N-methylaniline; methylcyclohexanone; 2-naphthol-3,6-disulfonic acid (including salts thereof); 7-nitronaphth[1,2]-oxadiazole-5-sulfonic acid (including salts thereof); d1-phenylephrine base; phenylsulfone; 2-pyridinecarboxyaldehyde; sodium tetraphenylboron; 2,4,4',5'-tetrachlorophenylsulfone 2,4,6-trimethylaniline; and vinylcarbazole, mono.

27(a)(3)(4)(5)—All products, by whatever name known, which are similar to any of the products provided for in paragraph 27 or 1651, tariff act of 1930, and which are obtained, derived, or manufactured in whole or in part from any of the products provided for in either of such paragraphs; and all mixtures, including solutions, consisting in whole or in part of any of the products provided for in subdivision (1), (2), or (5) of paragraph 27(a), tariff act of 1930: Products chiefly used as assistants in preparing or finishing textiles; 2,3-dichloro-1,4-naphthoquinone; hydroxycinnamic acid (including salts thereof); methyl parathion; and parathion.

28(a)—Colors, dyes, or stains, whether soluble or not in water, when obtained, derived, or manufactured in whole or in part from any of the products provided for in paragraph 27 or 1651, tariff act of 1930:

Acid black 31, 50, 94, and 129; acid blue 7, 25, 45, 54, 106, 127, 129, and 143; acid brown 44, 46, 48, 58, 188, and 189; acid green 40; acid red 130, 145, 174, and 211; acid violet 19, 31, 41, and 48; acid yellow 2, 75, and 116; basic blue 3; basic orange 22; basic red 13, and 14; basic violet 10, and 14; basic yellow 1, 2, 11, and 13; direct black 62, and 91; direct blue 86, 92, 106, 108, 109, 160, and 172; direct brown 103, 115, and 116; direct green 5, 29, and 31; direct orange 37; direct red 83; direct yellow 28; disperse blue 30; disperse red 4; fluorescent brightening agent 18, 24, 25, and 32; ingrain blue 2; mordant black 8, and 11; mordant green 47; mordant red 17, and 27; reactive black 1; reactive blue 1, 2, and 4; reactive orange 1; reactive red 1, 2, 3, 5, and 6; reactive yellow 1; solvent orange 11; solvent yellow 25; vat blue 2, and 6; vat brown 3; vat orange 2, 7, and 15; vat red 44; vat violet 9, and 13; vat yellow 4, and 20; vat solubilized orange 3; and all full-strength toners.

28(a)—Color acids, color bases, color lakes, leuco-compounds, whether colorless or not, indoxyl, and indoxyl compounds; all the foregoing when obtained, derived, or manufactured in whole or in part from any of the products provided for in paragraph 27 or 1651, tariff act of 1930.

28(a)—Photographic chemicals; saccharin; synthetic phenolic resin and all resin-like products prepared from phenol, cresol, phthalic anhydride, coumarone, indene, or from any other article or material provided for in paragraph 27 or 1651, tariff act of 1930, whether in a solid, semi-solid or liquid condition; all the foregoing, when obtained, derived, or manufactured in whole or in part from any of the products provided for in paragraph 27 or 1651, tariff act of 1930.

28(a)—Other medicinals, when obtained, derived, or manufactured in whole or in part from any of the products provided for in paragraph 27 or 1651, tariff act of 1930:

Diethylaminoacetoxylidide, including xylocaine; 5-ethyl-5-phenyl hexahydro-pyrimidine - 4:6 - dione; 2-benzyl-4,5-imidazoline hydrochloride, methylphenethylhydantoin, phenylbenzylaminoethyl imidazoline hydrochloride, and all other medicinals derived from imidazoline or hydantoin; 5-chloro-7-iodo-8-quinolinol; 2[1-(p-chlorophenyl)-3-dimethylaminopropyl]pyridine maleate; niacinamide; phenacetin; phenylephrine hydrochloride; sulfadiazine; sulfaguanidine; sulfamerazine; sulfamethazine; sulfapyridine; and salicylazofulfapyridine.

28(a)—Artificial musk and styrene, not marketable as perfumery, cosmetics, or toilet preparations, and not mixed and not compounded, and not containing alcohol, when obtained, derived, or manufactured in whole or in part from any of the products provided for in paragraph 27 or 1651, tariff act of 1930.

28(a)—Natural alizarin and natural indigo, and colors, dyes, stains, color acids, color bases, color lakes, leuco-compounds, indoxyl and indoxyl compounds, obtained, derived, or manufactured in whole or in part from natural alizarin or natural indigo, vanillin, from whatever source obtained, derived, or manufactured.

29—Cobalt: Oxide, sulfate; all other cobalt salts and compounds (not including linoleate).

30—Collodion and other liquid solutions of pyroxylin, of other cellulose esters or ethers, or of cellulose.

31(a)(1)(2)—Cellulose acetate, and compounds, combinations, or mixtures containing cellulose acetate, in blocks, sheets, rods, tubes, powder, flakes, briquets, or other forms, whether or not colloided, and waste wholly or in chief value of cellulose acetate; and finished or partly finished articles of which any of the foregoing is the component material of chief value, not specially provided for.

31(b)(1)(2)—All compounds of cellulose (except cellulose acetate, but including pyroxylin and other cellulose esters and ethers), and all compounds, combinations, or mixtures of which any such compound is the component material of chief value:

In sheets (except transparent sheets over 3/1000 of one inch and not over 32/1000 of one inch in thickness, of pyroxylin or of compounds, combinations, or mixtures of which pyroxylin is the component material of chief value), carboxymethyl cellulose in any form, and pyroxylin and compounds, combinations, or mixtures of which pyroxylin is the component material of chief value, in blocks, rods, tubes, powder, flakes, briquets, or other forms, whether or not colloided; and

finished or partly finished articles dutiable under clause (2) of paragraph 31(b), tariff act of 1930 (except smokeless powder).

31 (c)—Sheets, bands, and strips (whether known as cellophane or by any other name whatsoever), exceeding 1 inch in width but not exceeding 3 1000 of one inch in thickness, made by any artificial process from cellulose, a cellulose hydrate, a compound of cellulose (other than cellclose acetate), or a mixture containing any of the foregoing, by solidification into sheets, bands, or strips.

32—Compounds of cellulose, known as vulcanized or hard fiber, made wholly or in chief value of cellulose.

33—Compounds of casein, known as galalith, or by any other name, in blocks, sheets, rods, tubes, or other forms; and finished or partly finished articles of which any of the foregoing is the component material of chief value not specially provided for.

34—Drugs, such as barks, beans, berries, buds, bulbs, bulbous roots, excrescences, fruits, flowers, dried fibers, dried insects, grains, herbs, leaves, lichens, mosses, roots, stems, vegetables, seeds (aromatic, not garden seeds), seeds of morbid growth, weeds, and all other drugs of vegetable or animal origin; any of the foregoing which are natural and uncompounded drugs and not edible, and not specially provided for, but which are advanced in value or condition by shredding, grinding, chipping, crushing, or any other process or treatment whatever beyond that essential to the proper packing of the drugs and the prevention of decay or deterioration pending manufacture, and not containing alcohol.

35—Aconite, aloes, asafetida, cocculus indicus, ipecac, jalap, manna; barbasco or cube root; derris, tube, or tuba root; marshmallow or althea root, leaves and flowers; and mate; all the foregoing which are natural and uncompounded, but which are advanced in value or condition by shredding, grinding, chipping, crushing, or any other process or treatment whatever beyond that essential to proper packing and the prevention of decay or deterioration pending manufacture, and not containing alcohol.

36—Coca leaves.

37—Ethers and esters: Diethyl sulfate and dimethyl sulfate; ethers and esters of all kinds not specially provided for; all the foregoing not containing more than 10 percent of alcohol.

38 and [1] 1670(b)—Extracts, dyeing and tanning: Chestnut, cutch, chlorophyll, divi-divi, fustic, hemlock, myrobalan, Persian berry, quebracho, sumac, saffron, safflower, saffron cake, and other extracts, decoctions, and preparations of vegetable origin used for dyeing, coloring, staining, or tanning, not specially provided for, and not containing alcohol (not including logwood, mangrove, oak, valonia, and wattle).

[1] Certain of the articles listed have been temporarily transferred from paragraph 38 to the free list of the Tariff Act of 1930 (paragraph 1670(b)).

39—Flavoring extracts and natural or synthetic fruit flavors, fruit esters, oils, and essences, all the foregoing not containing alcohol, and not specially provided for.

40—Formaldehyde solution or formalin; and hexamethylenetetramine.

41—Edible gelatin; gelatin, glue of animal origin, glue size, and fish glue, not specially provided for; agar, pectin, isinglass, and manufactures, wholly or in chief value of gelatin, glue, or glue size.

42—Glycerin, crude.

43—Ink, and ink powders not specially provided for; drawing ink.

47—Licorice, extracts of, in pastes, rolls, or other forms.

49—Magnesium: Carbonate, precipitated; chloride, not specially provided for; sulfate or Epsom salts; oxide or calcined magnesia.

50—Manganese; Borate, resinate, sulfate and other manganese compounds and salts, not specially provided for.

51—Menthol, natural.

52—Oils, animal and fish: Whale and seal; sperm, crude, refined or otherwise processed; spermaceti wax; wool grease, whether or not suitable for medicinal use, including adeps lanae, hydrous or anhydrous; other animal and fish oils, fats, and greases, not specially provided for (except edible animal oils, fats, and greases, neatsfoot oil, and animal oils known as neatsfoot stock).

53—Oils, vegetable: Castor; olive, weighing with the immediate container less than forty pounds; olive, not specially provided for; rapeseed.

53—Expressed or extracted oils, not specially provided for: Corn or maize oil, and sunflower oil.

54—Coconut oil; sesame oil.

55—Alizarin assistant, Turkey red oil, sulfonated castor or other sulfonated animal or vegetable oils, soaps made in whole or in part from castor oil, and all soluble greases; all the foregoing in whatever form, and suitable for use in the processes of softening, dyeing, tanning, or finishing, not specially provided for.

56—Hydrogenated or hardened oils and fats; other oils and fats, the composition and properties of which have been changed by vulcanizing, oxidizing, chlorinating, nitrating, or any other chemical process, and not specially provided for.

57—Combinations and mixtures of animal, vegetable, or mineral oils or of any of them (except combinations or mixtures containing essential or distilled oils), with or without other substances, not specially provided for, and not containing alcohol.

58—Oils, distilled or essential: Eucalyptus; peppermint, sandalwood, and all other essential and distilled oils not specially provided for; all the foregoing not containing alcohol (not including lemon, grapefruit, orange, clove, and patchouli oils).

59—Opium.

60—Perfume materials: Ambergris and civet anethol, citral, heliotropin, ionone, rhodinol, safrol, terpineol, and all natural or synthetic odoriferous or aromatic chemicals, all the foregoing not mixed and not compounded, and not specially provided for (not including geraniol and hydroxycitronellal); all mixutres or combinations containing essential or distilled oils, or natural or synthetic odoriferous or aromatic substances; all the foregoing not containing more than 10 percent of alcohol.

61—Pertumery, including cologne and other toilet waters, articles of perfumery, whether in sachets or otherwise, and all preparations used as applications to the hair, mouth, teeth, or skin, such as cosmetics, dentifrices, tooth soaps, pastes, theatrical grease paints, pomades, powders, and other toilet preparations (not including bath salts).

64—Plasters, healing or curative, of all kinds, and court plaster.

65(a)(2)(3)—Paints, colors, and pigments, commonly known as artists', school, students', or children's paints or colors, in tubes, jars, cakes, pans, or other forms, not exceeding 1½ pounds net weight each:

In tubes or jars and valued at 20 cents or more per dozen pieces, and not assembled in paint sets, kits, or color outfits; or in tubes, jars, cakes, pans, or other forms when assembled in paint sets, kits, or color outfits, with or without brushes, water pans, outline drawings, stencils, or other articles.

66—Pigments, colors, stains, and paints, including enamel paints, whether dry mixed, or ground in or mixed with water, oil, or solutions other than oil, not specially provided for.

67—Precipitated barium sulfate or blanc fixe.

68—Blue pigments and all blues containing iron ferrocyanide or iron ferricyanide, in pulp, dry, or ground in or mixed with oil or water; ultramarine blue, dry, in pulp, or ground in or mixed with oil or water, wash and all other blues containing ultramarine.

69—Bone black or bone char, and blood char; decolorizing, deodorizing, or gas-absorbing chars and carbons, whether or not activated, and all activated chars and carbons.

70—Chrome yellow, chrome green, and other colors containing chromium, in pulp, dry, or ground in or mixed with oil or water.

71—Gas black, lampblack, and all other black pigments, by whatever name known, dry or ground in or mixed with oil or water, and not specially provided for:

Acetylene black.

73—Siennas, crude, washed, or ground; iron-oxide and iron-hydroxide pigments not specially provided for.

75—Spirit varnishes containing less than 5 percent of methyl alcohol; varnishes, including so-called gold size or japan but not including spirit varnishes, not specially provided for.

76—Cuprous oxide.

78—Potassium: Ferricyanide or red prussiate of potash; ferrocyanide or yellow prussiate of potash; bromide; hydroxide or caustic potash; nitrate or saltpeter, refined; and permanganate.

79—Sodium, potassium, beryllium, and caesium.

80—Toilet soap.

81—Sodium: Arsenate; chlorate; ferrocyanide or yellow prussiate of soda; nitrite, silicofluoride; sulfate, anhydrous; silicate.

82—Sodium hydrosulfite, hydrosulfite compounds, sulfoxylate compounds, and all combinations and mixtures of the foregoing.

83—Starches not specially provided for.

86—Strychnine, and salts of.

88—Tin bichloride, tin tetrachloride, and all other chemical compounds, mixtures, and salts, of which tin constitutes the element of chief value.

89—Titanium potassium oxalate, and all compounds and mixtures containing titanium.

91—Vanadic acid, vanadic anhydride, and salts of the foregoing; chemical compounds, mixtures, and salts, wholly or in chief value of vanadium, not specially provided for.

93—Zinc sulfide.

94—Collodion emulsion.

95—Azides, fulminates, fulminating powder, and other like articles not specially provided for.

AROMATICS
BY VERONA®
for RELIABILITY QUALITY and SERVICE
VERONA AROMATICS
26 VERONA AVENUE • NEWARK 4, NEW JERSEY

IMPORT · EXPORT · MANUFACTURE
PERFUME RAW MATERIALS
TACONIC NATURAL OILS COMPANY, INC.
221 Fourth Ave., New York 3

Bidsawya
AROMATIC CHEMICALS
ESSENTIAL OILS
FLAVORS
MUSK T
(ETHYLENE BRASSYLATE)
Produced by
TAKASAGO PERFUMERY CO. LTD. TOKYO, JAPAN
Exclusive distributors
BIDDLE SAWYER CORP.
20 VESEY STREET, NEW YORK 7, N. Y. WOrth 4-4084

Completely independent of any natural source
New from Roche®
LINALYL ISOBUTYRATE
Fruity, woody character with soft floral note. Stable. New low price.
ROCHE
AROMATICS DIVISION
HOFFMANN-LA ROCHE INC. · Nutley 10, New Jersey · NOrth 7-5000
In Canada: Hoffmann-La Roche Ltd., 1956 Bourdon Street, St. Laurent, Montreal 9, P. Q.

Greeff
SERVING THE CHEMICAL INDUSTRY SINCE 1880
MELILOTIN®
Dihydro Benzo Pyrone
Widely used food flavor and antioxidant
Send for samples and data sheet
R. W. GREEFF & CO., INC.
10 ROCKEFELLER PLAZA, NEW YORK, N. Y.
TRIBUNE TOWER, CHICAGO, ILLINOIS

Iron Oxide Picture Brighter Than Ever This Year as Pigments, Ferrites Surge

OPD 'Depth' Report on Iron Oxides

—*Continued from page 3*

pany, C. K. Williams & Co., Columbian Carbon Company and American Pigment Corporation—do not feel that they are pigments. Hence, they feel no responsibility about reporting output to the bureau.

Because producers are very secretive about what they are doing, it's difficult to piece together a total market picture for ferrites.

But with the TV set use of iron oxides running at an estimated 13 million pounds alone, it's obvious that the size of the "soft" ferrite market is substantial.

Uses of the second, or "hard," ferrite oxides involve magnetic properties of permanent, high remanence types. In this category, ceramic or plastic materials can be used in combination with the oxides.

Frigidaire's Refrigerator Door

One example of iron oxides in combination with plastic is Frigidaire's combination refrigerator door insulation and door-close, in which the plastic insulation strip around the door contains magnetic ferrite which clings to the metal surface of the refrigerator when the door is closed, obviating need for a door latch.

Hard ferrites, particularly of the barium-ferrite type, come into use in electric motors, loudspeakers and other areas where a high-energy, high-coercive-force, high-remanance material is required.

Information-storage ferrites, the third general category, are also called square-loop ferrites because their magnetism displays itself in the form of a hysteresis loop.

Because of this property these materials can be used in memory devices for electronic computers. A square hysteresis loop core can be considered a switching device. The speed at which it can switch is usually in the vicinity of one micro-second.

The high speed of operation of the memory, as well as other parts of a given electronic computer, enables vast calculations to be made in much less time than with old-fashioned devices.

The fourth group of ferrites, engineered for specific gyromagnetic effects, finds application chiefly in uses requiring operation in a frequency range of 500-30,000 megacycles per second.

This field includes many electronic applications in radar, missile guidance systems and the like where the ferrites' unique properties and weight-saving characteristics can be best utilized.

Magnetic Tapes and Ink

Then, too, there are two well-known end-uses for iron oxides with magnetic properties, one of which has been established for some time (magnetic tapes) and one which is coming up fast (magnetic ink).

The magnetic tape business was worth $30 million in 1959. Minnesota Mining was reported to have half of that, with Ampex Corporation a bit more than 20 percent. Several others comprised the remainder of the field.

Minnesota Mining has a plant at St. Paul, Minn., which supplies its entire captive needs for tape oxides and considers itself the largest single producer of oxides for magnetic tapes. (C. K. Williams is generally considered the largest producer of magnetic oxides overall.)

Like C. K. Williams, Minnesota Mining isn't about to estimate the total size of the market for tape oxides, or for magnetic oxides in general.

Estimates run anywhere from 6,000 to 10,000 tons annually for all magnetic oxides, with dollar value ranging from 60 cents per pound on up.

While Columbian Carbon and others have a stake in the business, it's pretty much of a dogfight between Minnesota Mining and C. K. Williams. These two have been involved in running litigation concerning a patent granted to Armour Research Foundation.

The patent, under which 3M is a licensee with exclusive rights to sub-license, was ruled invalid in court and Williams was cleared of infringement. The plaintiffs appealed and the decision is up for review.

However it comes out, both appear in a strong position to retain their share of business, with Williams the kingpin of the non-captive market.

The company is also in a strong position in the magnetic ink field. Big use for magnetic inks at present is in automated sorting of bank checks.

How the Process Works

Characters are written on checks in ferric oxide pigment, magnetized by a "writer" head, read, amplified and analyzed through a "reader" head. In this way the Burroughs "B101" electronic sorter, for instance, can handle 15,000 checks an hour.

It's hard to tell what volume of iron oxide is going in the direction of magnetic inks. Cost of processing equipment is high, and conversion is being made haltingly in some areas. However, present indications are that anywhere from fifteen to twenty-five tons a year of synthetic oxide is moving in this direction.

If this seems small, it must be remembered that current use of data handling equipment of this nature is also small. Further, writing of checks is expected to reach 500 million in 1970—more than twice today's volume.

Hence, the future for synthetic iron oxides in this half-pigment, half-electronic use looks very promising. Not all is sweetness and light however: There's a report that one company is offering a data processor that can read any kind of ink.

Aside from the tape and ink applications discussed above, there are several other noteworthy non- or semi-pigment applications for iron oxides.

Synthetic iron oxide has been used for many years as a catalyst in the manufacture of hydrogen in ammonia plants. Shell Chemical Company uses oxides in its styrene catalyst. Butadiene operations also are reported to use iron oxide catalyst.

Two more exotic applications of oxide include use in the conversion of ortho to para-hydrogen in a National Bureau of Standards process. Still another use is as a combustion controller in Thiokol-type solid fuel propellants.

In glass, synthetic iron oxides are added as "batch rouge," coloring plate glass with a greenish cast. This glass is used in automobiles, for instance, and has high ultraviolet absorptive properties. One big plate glass producer alone is said to take some 1,000 tons a year of oxide.

Whatever lies ahead for iron oxide in the non- or semi-pigment field, it's certain that as a pigment, it's here to stay, both in natural and synthetic forms.

Iron oxides, when used for their coloring properties, go into everything from barn paints to face powders, from fertilizer to bricks, from varnish stains to concrete.

One of the most unusual uses for iron oxide pigment—red in particular—is to impart a red color to fertilizer. Some years ago a large midwestern producer of fertilizer who had been compounding plant food which included dried blood, decided to drop the item from its formulation, since it was found that dried blood accomplished little in the way of plant nutrition.

A Bloodless Decision

The removal of the dried blood caused a change in the color of the fertilizer, and aroused the suspicions of farmers, who assumed that the lack of color meant that the stuff wasn't as good as it had been previously.

The fertilizer manufacturer found it was much more economical to restore the red color to the material by using iron oxide than to run up a possible high-cost customer service bill.

Iron oxide has been used as a stock-feed additive in the past, although its use has declined appreciably in favor of much-cheaper copperas, which has the advantage of being soluble whereas oxide is not.

When the Department of Agriculture recommended addition of an iron nutrition source to hog feeds some years back, it was shown that iron oxide was much cheaper than copperas or other salts. It was thereafter added to feeds, despite the fact that people have been trying to find out ever since how a hog could possibly absorb an insoluble material into its system.

But copperas is much more available today than it was then, and is about half as expensive as $35-a-ton iron oxide.

Whether or not iron oxide will be replaced completely by copperas as a stock-feed additive, chances are it will continue to be used to color dog food red. This is just one application where pigment properties are important and where the iron oxides fill the bill so well.

In fact, iron oxide colors have been among the workhorses of the coatings industry since the time of the cave drawings near Altamira, Spain.

A bison colored red and ocher has been standing in all his glory on the wall of this cave for some 18,000 years—pretty good testimony to the durability of iron oxide pigments.

Oxides Hold Their Own as Pigments

In recent years, despite the fact that all manner of pigments have come into competition with the oxides, they have held their own and, in fact, have expanded tremendously.

Back in 1921, some 42,800 tons of natural and synthetic oxides were produced at a value of somewhat less than $2 million. That volume has grown so that this year more than 120,000 tons may be sold at a value of well above $15 million. Some sources feel that business could be 10 percent better this year than it was in 1959.

Despite the fact that the market has nearly tripled in tonnage since 1921, the road up hasn't been easy, and frequently a bad business year has upset growth patterns.

In 1931, sales dropped to 32,100 tons from 52,800 tons in 1929, the nearest previous year for which figures are available. As late as 1954, pigment output showed declines of as much as 10,000 tons from the previous year.

A peak of 115,000 tons was reached in 1955, the year of record auto output (and consequent need for record amounts of oxides for primers and surfacers), and

—*Continued on page 60*

FINISHED IRON OXIDE PIGMENT PRODUCERS

They Turned Out A Record 117,000 Tons Last Year

Producer	*Plant Location*
American Pigment Corporation	Hiwassee, Va.
American Pigment Corporation	Pulaski, Va.
Blue Ridge Talc Company	Henry, Va.
Clinton Metallic Paint Company	Clinton, N. Y.
Columbian Carbon Company	Trenton, N. J.
Columbian Carbon Company	Monmouth Junction, N. J.
E. I. duPont de Nemours & Co.	Newark, N. J.
Mineral Pigments Corporation	Muirkirk, Md.
Minnesota Mining & Manufacturing Company	Copley, Ohio
New Riverside Ochre Company	Cartersville, Ga.
Prince Manufacturing Company	Bowmanstown, Pa.
Reichard-Coulston, Inc.	Bethlehem, Pa.
Ricketson Mineral Color Works	Milwaukee, Wis.
Geo. B. Smith Chemical Works	Maple Park, Ill.
Stabilized Pigments, Inc.	New Brunswick, N. J.
Tamms Industries Company	Springfield, Ill.
C. K. Williams & Co.	Easton, Pa.
C. K. Williams & Co.	Emeryville, Calif.
C. K. Williams & Co.	East St. Louis, Ill.

IRON OXIDE IMPORTS

1960	*16,000 tons
1959	14,907 tons
1958	11,672 tons
1957	13,074 tons
1956	13,055 tons
1955	13,959 tons
1954	10,722 tons
1953	11,013 tons

*Industry estimate

Source: Tariff Commission

Coatings Materials

Sales of paint, varnish and lacquer hit an all time high in April as factory shipments broke the $178 million mark. This is 20 percent higher than sales reported for March. The Bureau of Census reports that April's sales were 4 percent higher than April's of last year. The 20 percent monthly boost was recorded despite a slightly lower production figure in April. The output of all paint products was 59.5 million gallons in April, or 2 percent lower than the production in March when the output was 60.6 million gallons.

The phthalate plasticizer price picture broke after a steady rise in the price of raw materials in the last few weeks. The announcement by one leading producer to raise the phthalates promises to be the first of an industry-wide advance. Effective July 1, the price for dibutyl phthalate will be 28½ cents per pound. Dimethyl phthalate will be 26½ cents per pound and dioctyl phthalate will go from 25 cents per pound to 26 cents per pound. Also scheduled for an average of ½ to 2 cents per pound are all the producers brand-name plasticizers. Prices are on the basis of tankcar shipments, and cover both contract and spot business.

The casein import duty bill was reported out of committee week, minus the amendment that provided for a 2¾ cent per pound duty on imported edible casein. The duty was tacked on to imported caseinates instead. The bill now goes to the senate for a vote. Most trade sources feel certain that the bill will be passed in its present form. As it stands now, the bill calls for a renewal of the suspension of casein, both industrial and edible, for three years or until June 30, 1963.

July 1 Price Advances

Dibutyl phthalate, 1 cent per pound.
Dimethyl phthalate, 1 cent per pound.
Diocityl phthalate, 1 cent per pound.

Prices for casein in the Argentine were firmer but unchanged. Firmness in the market took place against the news that stocks in the Argentine are at low levels. The New Zealand and Australian casein markets are unchanged in listings. Polish casein continues to be quoted in the range of the Argentine material.

Prime pigment demand is reported to be at its high seasonal levels. Prices for the dry colors, aluminum paste and powder and lead pigments are said to be about routine in activity. Prices are unchanged. The only price change in the prime pigments this week took place in eosin red toner. One producer announced that the new price for his material will be $1.95, or a 10 cents per pound higher. The price became effective June 1.

Prime Pigments

Aluminum Paste and Powder—Market conditions are described as routine with prices unchanged. Prices are: 71 cents per pound for aluminum paste, lining, extra-fine and 48½ cents per pound for standard grade. Aluminum powder, lining, extra-fine is at $1.13 per pound while standard grade remains 83 cents per pound. All prices are for material in drums.

Dry Colors—Demand continues to well sustained for most of the dry colors. Prices are reported to be firm at their old listings.

Eosin Red Toner—A leading producer has announced a price change on eosin red toner. The old price had been $1.85 per pound. Effective June 1, the new price became $1.95 per pound. The producer states that there will be no change in contract terms or differentials.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	June 12, 1959
103.14	103.14	103.03	103.05
103.14	103.14	103.03	103.05

For Current Prices see Page 10

Lead Pigments—No change is reported in the status of market conditions affecting the lead pigments. Demand continues to run at routine levels. Prices and supplies are unchanged. Quotations are firm, supplies are adequate.

Synthetic Resins

Melamines—A leading producer introduced a new water-soluble melamine-acrylic resin. The resin is said to be exceptionally suited for enamel paints. Used in paint enamel formulation the product is reported to deliver excellent film characteristics with a minimum of fire hazard and maintenance that usually accompany conventional solvent-type formulations.

The producer hopes to grab a good share of the estimated 55 million pound a year market for baking enamels in the automobile, heavy appliance, and building industries. Also on schedule is water-soluble resin primer to compliment the new enamel, the first of a line the company hopes to develop into a family of resins.

Being solvent-free, the new resin, when used as a coating, provides the user with the additional features of lower insurance rates, improved working conditions and ease of maintenance. Its non-existent flash point, should be especially attractive to fire underwriters.

The lower insurance rates are a big factor in the producers' campaign to gain consumer acceptance. The lower rates are cited as a compensating factor to the relatively higher cost of the resin.

Effective July 1, the price for the new resin will be 45 cents per pound. Already, the producer reports that strong demand for his product is coming from such far-off places as Japan, a country noted for its cost-consciousness.

A new surface coating resin has been developed by a leading chemical firm. The resin is reported to provide exceptional impact resistance, hardness and mar-resistance to baked enamels combined with a high degree of flexibility when formulated for use with alkyds.

The producer states that the new resin is 1½ times more effective than melamine resins in alkyd/amino systems. This allows formulators greater latitude in their operations and results in a more economical use of materials since one pound of the resin can replace 1½ pounds of melamine resin. The new product is available in a variety of units of sale. No price was given in the announcement of the products development.

Lacquer Materials

Plasticizers — With advances in the prices of naphthalene and phthalic anhydride in the last few weeks, the plasticizer price pattern finally gave way to the rising price trend. Producers were somewhat cautious after the abortive attempt a few months ago to raise phthalate plasticizer prices. Last week the ice was broken with the first of what promises to

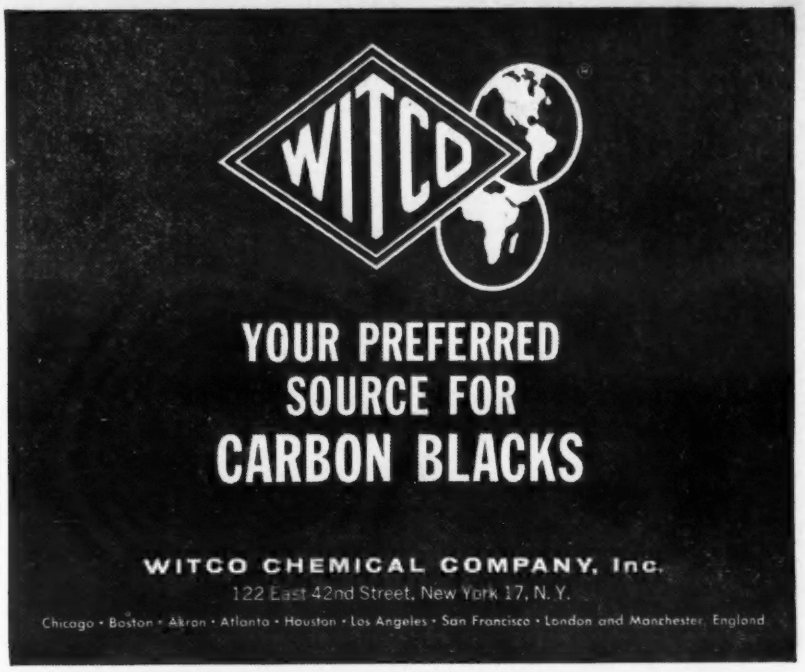
—*Continued on page 67*

Coatings Shipments, Output: April

	Factory Shipments Dollars		Reported productions Gallons[1]	
	April	March	April	March
Trade sales	$113,400,000	$84,600,000	32,100,000	31,100,000
Industrial sales, total	64,900,000	29,500,000	27,400,000	29,500,000
Paint and varnish	48,300,000	47,100,000	20,400,000	21,900,000
Lacquer	16,600,000	17,500,000	7,000,000	7,600,000
Overall totals	178,300,000	149,200,000	59,500,000	60,600,000

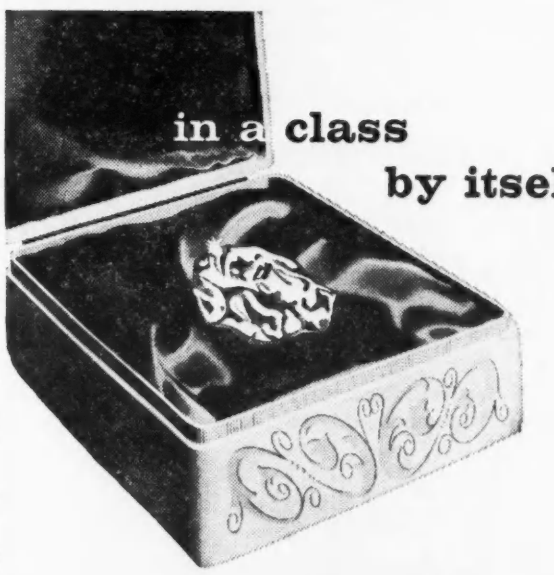
Totals sales, Jan.-April: $428,500,000.

[1] Estimated total production. About 2 percent of this total was imputed for companies that reported only dollar sales.


WITCO
YOUR PREFERRED
SOURCE FOR
CARBON BLACKS
WITCO CHEMICAL COMPANY, Inc.
122 East 42nd Street, New York 17, N. Y.
Chicago • Boston • Akron • Atlanta • Houston • Los Angeles • San Francisco • London and Manchester, England

CHAS. L. READ & CO., INC.
1 NEWARK AVENUE, JERSEY CITY, N. J.
Phone: NEW JERSEY DE 2-2062 NEW YORK WO 4-1131
THE GREATEST NAME IN TURPENTINE
GUM SPIRITS • STEAM DISTILLED • SULPHATE

DRY COLORS — DYESTUFFS
IMPORT EXPORT
FEZANDIE & SPERRLÉ 205 Fulton Street NEW YORK
Telephones: COrtlandt 7-1460-1461 Cable Address: "Fezan," N. Y.



Piccolyte

Piccolyte is a true polyterpene hydrocarbon resin, neutral and non-reactive. Piccolyte is water, alkali, and acid resistant, with broad solubility and compatibility characteristics. Piccolyte is available in melting point grades from 10°C through 135°C (B & R), solutions in mineral spirits, and anionic emulsion.

Piccolyte's outstanding advantages are used in caulks, cements, chewing gum, leather treating, paint, paper coatings, adhesives, printing ink, rubber, textiles, and wax compounding.

The trademark of quality
PENNSYLVANIA INDUSTRIAL CHEMICAL CORPORATION
CLAIRTON, PENNSYLVANIA

Cellulose acetate
Cellulose acetate
butyrate

Eastman
CHEMICAL PRODUCTS, INC.
KINGSPORT, TENNESSEE
subsidiary of EASTMAN KODAK COMPANY

FILTERFAB
GLASS CLOTH
IN
ROLLS OR CONVERTED
TO YOUR NEEDS
FILTER FABRICS INC.
GOSHEN, INDIANA • Phone: KE 3-6430
Cleveland, Ohio • Phone: CH 1-0456
728 Leader Bldg.

CASEIN
ALL GRADES
• HYDROCHLORIC • LACTIC
• RENNET
"NATIONAL CASEIN"
NATIONAL CASEIN CO., CHICAGO 20, ILL.
TYLER, TEXAS
NATIONAL CASEIN OF NEW JERSEY
RIVERTON, N. J.

Always Specify
GRP
THE PREFERRED SHELLAC
Importers and Processors of
Uniform Highest Quality Shellac
•
Regular and Refined (Dewaxed)
Bleached White in 50 lb. bags.
•
White and Orange Liquid
Refined (Wax-free) Solutions
Confectioner's and Pharmaceutical Glaze
Shellac Wax
•
All Grades Orange Flake
Buttonlac and Garnet
•
Specialties for Special Purposes
GILLESPIE-ROGERS-PYATT CO., INC.
Office: 75 West St., New York 6, N.Y.
Plant and Laboratory: Jersey City, N.J.
Sales Representatives and Warehouse Stocks
in Principal Cities in U. S. A.

Iron Oxide Picture Brighter Than Ever

OPD 'Depth' Report on Iron Oxides

—*Continued from page 58*

then production tailed off steadily until 1959, when it set a new record.

These ups and downs illustrate how closely iron oxide pigments are tied to the economy. When construction is booming, so is the requirement for iron oxide for coloring bricks and concrete, for glass batch rouge and polishing, for industrial and trade sales of paint.

While the oxides have lost out here and there to other pigments in specific applications, the surge in latex paints has more than compensated for losses in other areas. Reason is that the oxides are chemically stable, permanent and light-fast—essentials in latex paint formulation.

Want an Iron Oxides Reprint?

OPD's special "in-depth" report on iron oxides is being reprinted and will be available shortly. Copies may be obtained at 35 cents each (discounts on quantities of a hundred) from OIL, PAINT AND DRUG REPORTER'S Reprint Department, 30 Church Street, New York 7.

One reason iron oxide pigments have been able to prevail is constant improvements in technology. There was a time when the materials were dug up and ground, roasted or left raw according to desired shade.

But in recent years the natural oxides (ochers, siennas, umbers, natural reds and browns) have been losing out to synthetics. As recently as 1953, natural pigments dominated the market. Since then, however, the trend has been swiftly in the direction of synthetics.

The Rise of Synthetics

In 1953, naturals comprised about half the total sold, and synthetics, slightly less. By 1958, the most recent year for which a breakdown is available, naturals had fallen to 31 percent of the total.

Manufacturers who sell both natural and synthetic pigments freely concede that the future belongs to synthetics. But they hasten to add that naturals will always have a place in the market picture, chiefly on a cost basis.

It's significant to note, however, that despite the 20 percent increase in total pigment sales in 1959, the industry estimates that production and sales of natural pigments in this country (some 53,000 tons) declined from the previous year's total (55,310 tons).

Most producers of natural and synthetic pigments, incidentally, feel that Mines bureau figures should be taken with a grain of salt. Their chief complaints: duplication in some instances, misleading reporting of materials in others.

In defense of the bureau, however, it must be said that all it has to work with is what producers report to it; its figures reflect what the industry says is going on.

In 1958, for instance, it was reported to the bureau that 16,167 tons of sienna were mined. This caused quite a bit of consternation in the trade, since the normal figure is about 5,000 tons annually. However, it is known that one producer reported an abnormally large output total to the bureau, and the figure had to be used at face value.

Whatever hassles may be taking place over the reporting of domestic figures, there's one area where there is little disagreement: imports.

Imports today comprise about 10 percent of the market, and are likely to do so for some time to come. A big reason for this sizable slug of color is West Germany.

Badische-Anilin's Process

Badische-Anilin-u.-Sodafabrik produces aniline from nitrobenzene, finely divided iron and hydrochloric acid. This yields a high-quality byproduct "aniline sludge" which is suitable for use in pigments. Aniline is produced in this country by similar means, but the iron salt byproducts are of low purity.

Minimum world potential (countries outside the US) has been estimated at close to 200,000 tons annually of natural and synthetic pigments. Already 5 percent of world potential is being imported into the US.

While producers here are concerned about foreign competition, they feel that they'll be able to hold their own, even in what has been historically a low-profit business.

Although there are a few spots of pessimism here and there, general feeling is that the oxides will continue to grow during the sixties—magnetic oxides at something more than 10 percent a year, pigment oxides at a somewhat lesser rate.

ULTRAMARINE
BLUES
• Prompt deliveries through nation-wide warehouses
• Complete range of types
• Experienced technical service
The Big Name in Quality Ultramarine Blues
(formerly sold by American Cyanamid Company)
UNITED ULTRAMARINE & CHEMICAL COMPANY, INC.
149 Broadway, New York 6, N.Y.

WITCO
YOUR PREFERRED
SOURCE FOR
PAINT DRIERS
WITCO CHEMICAL COMPANY, Inc.
122 East 42nd Street, New York 17, N. Y.
Chicago • Boston • Akron • Atlanta • Houston • Los Angeles • San Francisco • London and Manchester, England

Oils, Fats and Waxes

Strength of soybean oil continued to feature the edible oil group last week. Active export interest combined with limited oil supply for prompt shipment further stiffened the market and quotations were fractionally higher. Cottonseed oil was quiet, but firm because of the scarcity of crude oil. Corn oil was easy and slightly lower. Peanut oil was scarce and steady. Crude coconut oil continued unsettled and was fractionally lower for prompt and forward shipment on the Pacific coast and New York.

Tallow and greases were unsettled declining 1/8 cent to 1/4 as to grade. Domestic demand was confined to actual needs and export business dried up.

Tung oil was stronger and sales were made at 1/2 cent higher for prompt delivery. Offers were scarce due to tight supply situation and the uncertainty of obtaining replacements from the Argentine before new crop is available in late September. Oiticica oil was maintained at unchanged prices and were dragging along the bottom. Brazilian castor also was firmer and in good request resulting in sellers advancing prices 1/4 cent per pound. Linseed oil was unchanged despite lower flaxseed market. New business was quiet, but marked improvement was noted in deliveries against existing contracts.

Slow demand for soybean meal unsettled this market and prices drifted 50 cent per ton lower. Linseed meal was weakened by lush pastures and market also dropped $1 per ton. Cottonseed oil was in limited supply, up $1 per ton. Peanut meal also was scarce and unchanged.

Adverse conditions were blamed for the smaller production of India's 1959-60 oilseeds crops. Estimates of production were: peanuts, 4,917,000 short tons compared with 5,380,000 tons in 1958-59; rapte-mustard, 1,138,000 short tons compared with 1,197,000 tons; sesame, 476,000 short tons against 552,000 tons; linseed, 446,000 short tons against 482,000 tons; castor, 121,000 short tons against 125,000 tons. Under the second five-year plan ending March 31, 1961, the target for oilseed production next season is 8,456,000 short tons, according to the Foreign Agricultural Service.

Price Trends

Advanced

Castor oil, No. 1, Braz., 1/4c per lb.
Cottonseed meal, $1 per ton.
Cottonseed oil, crude, 1/8c. per lb.
Japan wax, 2c. per lb.
Soybean oil, crude, 1/8c. per lb.
Refd., 1/8c. per lb.
Tung oil, dom., 1/8c. per lb.
imported, 1/2c. per lb.

Reduced

Carnauba, wax, yellow, 2c. per lb.
Coconut oil, crude, N.Y., 1/2c. per lb.
Pac. coast, 1/4c. per lb.
Corn oil, crude, 1/8c. per lb.
Refd., 1/8c. per lb.
Greases, 1/8c. to 1/4c. per lb.
Linseed meal, 50c. per ton.
Oleo stearine, 1/4c. per lb.
Soybean meal, $1 per ton.
Tallow, inedible, 1/8c. to 1/4c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	June 12, 1959
112.40	112.40	111.83	110.48

For Current Prices see page 10

Crude oil was scarce and strong, with sales at 10 5/8c. per pound, tankcars, Valley, Waco and Lubbock were higher at 10 1/4c., tankcars, and the southeast was nominal at 10 3/4c.

Linseed—Raw oil remained unchanged, despite lower flaxseed market. Demand for oil against existing contracts continued to increase steadily and was up to seasonal volume. Tankcars were held at 13.2c. per pound, Minneapolis, June-August delivery; 13.4c., September-November, same basis and 14.30c., tankcars, f.o.b. New York.

Oiticica—Trading was light, chiefly for actual needs, while new business lacked volume, offerings were well held at 14c. per pound, tankcars, New York, prompt shipment. Drums were unchanged at 16c. to 16 1/2c. per pound, spot, depending upon quantity.

Olive—Demand was reported limited, though the local market remained steady, reflecting the strength of replacements from abroad. Spanish oil was firm at $57 per 100 kilos, drums, f.o.b. ports, June-July shipment. Tunisian and Greek oils were higher and nominal. Stocks on spot were maintained at $2.40 to $2.50 per gallon, drums, duty paid, as to quantity.

Palm—Market was quiet and unchanged. Drums were quoted at 14c. to 15c. per pound, spot, depending upon quantity. Tankcars were slightly lower, available at 11.70c., New York, prompt delivery.

Peanut—Offerings were scarce and the market was more or less nominal. Last sales of crude were reported at 16c. per pound, tankcars, f.o.b. mills, prompt shipment. Refined oil was quiet and named at 16 1/4c., tankcars, New York, prompt delivery.

Soybean—Active export interest and tight supply condition for prompt shipment continued to feature the market. Crude was firmer and sold at 8 5/8c. per pound, unrestricted, tankcars, June-July shipment. Refined salad was stronger and raised to 10 3/4c., tankcars, New York basis.

Spain was reported to have purchased 15,000 tons of soybean oil against requests for offers of 40,000 tons. Poland bought 600 tons. Other countries — Yugoslavia and United Arab Republic continued to show interest in the market.

Tung — Increased demand combined with tight supplies further strengthened this market. Trading was moderate. Sales were reported up to 23 1/4c. per pound, tankcars, New York, prompt delivery. Offers were light and closely held due to uncertainty of obtaining replacements from the Argentine before new crop oil becomes available late September. Drums were higher at 24 3/4c. to 25 1/4c., spot, depending upon quantity. Domestic oil was firmer at 22 1/8c. to 22 1/4c. tankcars, f.o.b. mills.

CCC rejected bids of 15.20c. per pound, bulk, f.o.b. Marrero, La., for export last week. Previous business took place at 15.15c., same basis. The agency will offer 1 million pounds this week.

Vegetable Oil

Castor—Business was spotty. Market was firmer. No. 1 Brazilian oil was in demand and advanced to 18 1/2c. per pound, tankcars, New York, prompt delivery. Domestic grades were quiet and unchanged.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

	Pounds	
	Castor Beans	Castor Oil
Last week	494.700	1.528.000
Previous week	....	1.136.000
Corresponding week, 1959	....	2.126.000
Total this year	2.429.400	40.730.000
Corresponding period, 1959	12.411.550	36.718.000

Coconut—Market was quiet and unsettled. Crude was lower and available at 13 1/2c. per pound, tankcars, f.o.b. Pacific coast, June shipment and 13 1/4c. for July, same basis. The New York market was lower and nominal at 15 1/2c., tankcars, prompt delivery.

Corn—Crude was easy. Tankcars were sold at 12 1/4c. per pound, f.o.b. mills, for prompt shipment. Refined oil was lower at 15.98c. per pound, tankcars, New York delivery.

Cottonseed—Liquidation and stop loss orders caused futures to drop sharply on the New York Produce Exchange last week. Trading was active and mixed. While futures were lower, cash oil remained unchanged and steady, reflecting the firm crude oil market. Refined salad oil was maintained at 13 5/8c. per pound, tankcars, New York, prompt delivery. Growing conditions in the cotton and soybean belts continued favorable.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, June 10, follow:

	Sales	High	Low	Close
		Cents per Pound		
July	791	12.21	11.79	11.79S
Sept.	409	12.16	11.74	11.74S
Oct.	73	11.97	11.54	11.54S
Dec.	100	11.90	11.52	11.52S
March	5	11.85	11.72	11.58@11.64
May	6	11.95	11.56	11.56S
July	5	11.65	11.64	11.64S

Total sales and switches, 1,389 contracts.

Miscellaneous

Cocoa Butter—Demand was spotty. Market was unchanged, ranging from 56c. to 61c. per pound, spot delivery, according to quantity.

Copra—Buying interest was reported

AMERICAN MONTAN WAX

alpco

CONSIDER THAT ALPCO WAX . . .
- is guaranteed to be uniform
- is free from import restrictions
- is price stabilized
- is stocked at convenient points
- is offered with technical advice

REFINED GRADES (decolorized) NOW AVAILABLE

Produced in California by:
AMERICAN LIGNITE PRODUCTS COMPANY, INC.
IONE, CALIFORNIA
Sales Offices: 110 E. 42nd St.—RM 1211—New York City 17 Ione, Calif.

RIEBECK® MONTAN WAX

Carnauba • Candelilla • Bayberry
Japan • Beeswax • Ouricury
Spermaceti • Ceresins • Ozokerites
"Custom Blended" Palm Waxes

These Brands are your guarantee of quality: Bonauba, Carbacote, Spermatine, Kiki,Kiku, K-Brand

Sole Importers U. S. and Canada, Riebeck Romonta Montan Waxes
STROHMEYER & ARPE CO. 139 Franklin Street, New York 13, New York, WA 5-2300

OLEIC ACID
STEARIC ACID
HYDROGENATED TALLOW FATTY ACIDS

ACME HARDESTY CO.
60 East 42nd Street
New York City 17, N. Y.
MUrray Hill 2-8556
Factory: Philadelphia, Pa.

DISTILLED VEGETABLE F.A.
DISTILLED TALLOW F.A.
HYDROGENATED TALLOW GLYCERIDES.

SUN BLEACHED

Beehive Brand BEESWAX
• FINEST QUALITY
• GUARANTEED PURE
WILL & BAUMER CANDLE CO., INC.
Dept. OP-6 Established 1855 Syracuse, N. Y.
Spermaceti Ceresine Red Oil Glycerine Stearic Acid

WARRANTED PURE BEES WAX

You just can't miss . . . with
EMERSOL®
OLEIC ACIDS

Most of our customers know that grade for grade the competitively priced Emersol Oleic Acids are superior to other oleics in color, odor and keeping qualities. If you haven't discovered this yet, place your next order with Emery. The proof will be evident in your own product.

For full details on all 9 grades of Emersol Oleic Acids, write Dept. O for 20-page Emeryfacts, titled "Emersol Oleic Acids."

Emery FATTY ACID SALES DEPT.

New York • Philadelphia • Boston
Chicago • Cleveland
Ecclestone Chemical Co., Detroit
West Coast: Vopcolene Division
5568 E. 61st Street, Los Angeles 22, Calif.
In Canada: Emery Industries (Canada) Ltd.
639 Nelson St., London, Ontario
Warehouse stocks also in Baltimore and Buffalo
Export Dept.: Carew Tower, Cincinnati 2, Ohio

Emery Industries, Inc.,
Carew Tower, Cincinnati 2, Ohio

HOECHST

WAXES

COMPATIBILITY — with polymer dispersions and low-cost waxes enables high-quality end-products at lower cost.

ECONOMY — lower costs, savings in time and money in production.

DELIVERY — prompt delivery from local warehouses.

- Emulsions — Waxes KPS, KSS, VP-115, LP
- Polishes — All Grades
- Carbon Paper — KP, OP, VP-301
- Aerosols — Waxes S, V, W
- Plastics Processing — E, OP
- Clear Solvent Solutions — Waxes W, V
- Hot Melts — Waxes W, OP, E, S
- Water-proofing — All Grades
- Reactive "Wax Acid" Intermediates — Waxes S, L, LP
- Complete Hardness Range — All Grades

HOSTAWAX COMPANY
A Division of HOSTACHEM Corporation
350 Fifth Avenue
New York 1, N. Y.
Tel: LOngacre 4-3530

In Canada: Davies Irwin Ltd., 121 Bates Road, Outremont, Montreal 8, Quebec

PRESSED

Sperm Oils

For improved extreme pressure lubricants, penetrating oils and transmission fluids.

Quality Checked by Gas Chromatograph

WRITE FOR DATA
Archer-Daniels-Midland
CHEMICAL PRODUCTS DIVISION
723 Investors Building, Minneapolis 2, Minn.

Cold Pressed
EXTRA PALE
CASTOR OIL
American No. 1 Quality

USP	*Other Grades* No. 1	No. 3

Bonded stocks for export

WAREHOUSE STOCKS
NEW YORK MONTREAL

BUNGE CORPORATION
42 Broadway New York 4, N. Y.
WHitehall 3-6600

Crude Refined Bleached

ROSS WAXES

Flaked Powdered
SINCE 1902

CARNAUBA, OURICURY, JAPAN BEESWAX, CANDELILLA, PALM MONTAN, ESPARTO, CERESINE OZOKERITE, DUREZ WAX BLENDS CUSTOM-MADE WAXES

FRANK B. ROSS CO., INC.
IMPORTERS — REFINERS — BLEACHERS
6-10 Ash Street Jersey City 4, N. J.
Telephone: HEnderson 3-4512

For Domestic and Export
COTTONSEED MEAL AND CAKE
PEANUT MEAL-SOYABEAN MEAL

Export Codes: ABC 5th, BENTLEY'S JUNIOR PEERLESS

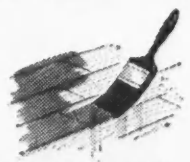
Cable Address: BRODE
Phones: L. D. 271 — Local 38-2544
Teletype No. ME-260

THE BRODÉ CORPORATION
P. O. Box 700 1012 Falls Building
MEMPHIS, TENNESSEE

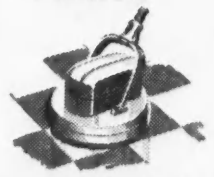
IMPROVED PERFORMANCE IN

INKS

PAINTS


VARNISHES

PAPER COATINGS


POLISHES

DAIRY WAXES

with AC® Polyethylene

Stable supply • Hot melt and emulsifiable • Uniform cube and atomized grades

Allied Chemical

Write for details today to:
SEMET-SOLVAY PETROCHEMICAL DIVISION
Dept. 575-AU, 40 Rector Street, New York 6, N. Y.
National Distribution • Warehousing in Principal Cities

Oils, Fats and Waxes

slow. June shipment was nominal at $187.50 per ton, c.i.f. Pacific coast and $185, July, following sales at $180 per ton.

Flaxseed—Crushers reduced flaxseed bids to $3.22 a bushel in the spot market, reflecting more than ample offerings for limited needs. Moderate spurt of bookings occurred ahead of the declines, totaling four cars and 30,000 bushels in the spot market and 13 cars and about 75,000 bushels on to-arrive basis. Weak undertone persisted at the lower level. Seeding was nearing completion over most of the flax belt and growing conditions were good to excellent. Arrivals for all accounts totaled 60 cars, against 101 a year ago. Shipped were 15 cars, against 34 last year.

Fats and Greases

Greases—Buying interest was lagged. Market was unsettled, declining ⅛c. to ¼c., depending upon grade. Choice white was offered at 6⅝c. per pound, tankcars, delivered, with bids ⅛c. less. Yellow ranged from 5⅛c. to 5¼c., same basis.

Lard — Market was irregular closing slightly lower. Cash lard was quoted at 9.725c. per pound, drums.

Tallow — Trading continued spotty, chiefly for actual needs. Soapers were reported out the market. Prices were lower, off ⅛c. to ¼c. Bleached fancy was quoted at 5¾c. per pound, tankcars, delivered. Prime was held at 5½c.; special, 5⅜c.; No. 1, 5⅛c. and guaranteed fancy, 6c., same basis. Export inquiry was slow. Guaranteed fancy was nominal at 6¼c. per pound, bulk, f.o.b. and 7¼c., drums, f.a.s.

Fish Oils

Cod—Shipments were firm because of the scarcity of oil at primary sources. Consuming interest was quite active, with sales made up to 7⅜c. per pound, bulk, f.o.b. Gloucester, Mass. Old crop oil was practically sold up.

Menhaden—There was little doing in the crude market. Inquiry for domestic and export delivery was quiet. Tankcars were nominal at 6¾c. per pound, f.o.b. works. Refined grades were unchanged at the recent decline of ½c. Trading was spotty. Light pressed was quoted at 9½c. per pound, tankcars, New York, prompt delivery. Fishing in the Gulf was reported light and the catch in Atlantic was fair last week.

Whale—World whale oil production in 1960 is forecast at 430,000 short tons up 3 percent from 1959. Production of sperm oil is expected to be 115,000 tons, down 10,000 tons from the previous year. The larger expected output of whale oil is based on a slightly larger outturn in the Antarctic in 1959-60, while the decline in sperm oil results from a smaller Antarctic output.

Antarctic whaling including the 20 pelagic expeditions and 3 South Georgia shore stations, again accounted for over 85 percent (375,000 tons) of the expected 1960 outturn of whale oil. Antarctic whale oil production in 1959 totaled 365,000 tons. A sharp increase in the output of the Soviet Union and relatively small increases by the United Kingdom and the Netherlands were offset somewhat by the 23,000 ton drop by Norway.

Cake and Meal

Cottonseed Meal—Light stocks were advanced $1 per ton. Meal, 41 percent was quoted at $58 per ton, sacked, Memphis and $61.50, Georgia-Carolina points.

Linseed Meal—Weakness developed in this market, reflecting lagging formula feed business as a result of lush pastures. Prices dropped 50c. a ton. Increased inquiry from exporters checked further declines. Shipping directions were only fair but kept pace with production. Extracted meal, 34 percent, was $53 a ton, bulk, in carlots, f.o.b., Minneaplis, for June delivery. Old process expeller meal was steady at $61.50, June.

Peanut Meal—Stocks continued to be absorbed as fast as produced. Prices were unchanged and steady. Old process was quoted at $52.50 per ton, sacked and solvent at $50, f.o.b. Georgia and Alabama areas.

Soybean Meal—Demand was slow, offset to some extent by additional production curtailment, but prices drifted $1 lower

—Continued on page 65

PARTIAL LISTINGS

1—Stainless Autoclave 30 gal. 1000 psi.
1—Cyclotherm Package Boiler 250 psi, 600# hr.
1—Stokes #38 Drying Cabinet, 16 shelves.
4—Stainless Vacuum Receivers 100 to 350 gals.
12—Stainless Jack. Kettles 50 to 100 gals.
10—Stainless Steel Tanks 200-600 gals.
1—Patterson 5'x6' Jack. Ball Mill.
1—Horiz. Spiral Mixer 3'x12', Jack.
2—Spiral Blenders 800# & 2000#, Jacketed.
2—Lightnin' 7½ HP Side Agitators.
1—Patterson 5x6 Jack. Ball Mill 25 HP.
1—Stainless Steel Closed Jack. Kettle, 200 gals.
3—Lightnin' Agitators 1½ HP 431 rpm.
1—Raymond #3036—3 Roll High Side Mill.
1—Condenser Stainless Steel 52 sq. ft.

We Buy Single Items to Complete Plants
Send Us Your Lists

THE MACHINERY & EQUIPMENT CO.
91-93 New Jersey R.R. Ave., Newark 5, N.J.
MArket 2-3103

PULVERIZER—3 HP #00 Sturtevant—10HP 2TH Mikro—30 HP Raymond—50 HP 3TH Mikro (unused).

DUST COLLECTOR—Mikro Model 36-1-84—Sly 43"x77"x73½" H-459-D.

SCREENS—12"x72" S/S—20x84 Rotex—20x96 Rotex—3x5, 3x10 Tyler Hummer—30x68 Jeffrey.

MIXERS—1 c.f., 20 c.f. double cone—30 c.f. Patterson Kelly—12 c.f., 22 c.f. Ribbon—40 gal. S/S Pony—60 gal. Post—1 HP 1150 RPM Lightnin'.

FEEDERS—4¼"x24", 24"x72" Syntron S/S—Draver controlled rate, Hardinge Constant Weight.

AIR CLASSIFIERS—Gayco 30"—Sturtevant 36"—Gayco 5', all w/motor drives.

KETTLES—24x30 S/S 125 PSI, Jacket 75 PSI—S/S lined 150 gal. 40 PSI, Jacket 75 PSI.

LAWLER COMPANY
LAWLER PLACE METUCHEN, N. J.
LIBERTY 9-0245

WIRE US COLLECT!

1—Downington 52 sq. ft. Nickel Shell and Tube Heat Exchanger.
3—J. H. Day 100 gal. Sigma Mixers. Cincinnatus size 6 Class 6.
1—Pfaudler 150 gal. unjacketed Glass lined Kettle. 1 HP Agit.
2—Sweco 48" 3 Deck Screen, S.S. Screens. 1 HP Motor.
1—66" x 35' Rotary Flame Dryer. Nickel lined monel lifters.
1—Allis-Chalmers 10' x 200' Rotary Kiln. 3/4" shell. Comp./equipped.
2—Tolhurst 40" center slung rub. covered Perf. Bas. Centrifuge.
2—Tolhurst 48" perf. Basket S.S. Centrifuges. Susp. type

For immediate quote, wire or phone collect—GA 1-1380

ME MACHINERY AND EQUIPMENT COMPANY
123 Townsend St. - San Francisco 7, California

BRILL FOR VALUES

CENTRIFUGES

2—Sharples C-27 Super-D-Hydrator, 316 S.S. Monel.
1—Bird 18"x28", Solid Bowl, Continuous, 316 S.S.
1—Bird 36"x50", Solid Bowl, Continuous, 347 S.S.
3—Sharples PY14, PN14 Super-D-Canters 316 S.S.
1—Tolhurst 26" susp. Rubber Imperforate Basket.
1—Tolhurst 32" susp. 317 S.S. Perforated Basket.
2—AT&M 48" Suspended 316 S.S. Perforated Basket.
2—Sharples #16, 304 S.S., 3 HP motor.

REACTORS — EVAPS — CONDS — TANKS

1—Alloy 75 gal. 316 S.S. Jktd., Agtd. Reactor.
1—650 gal. 304 S.S. Reactor with 100 sq. ft. Bayonet Heater.
1—1400 gal. Blaw-Knox, steel, jacketed, agitated Reactor.
1—4000 gal. 316 S.S. clad agitated Reactor with coils.
1—550 sq. ft. Buflovak monel single effect Evaporator.
1—7500 gal. 316 S.S. Vert. Storage Tank, 7'x25', 50 psi.
1—750 gal. nickel clad Mixing Tank, 125# nickel coils.
6—1200 gal. 304 S.S. Tanks, 6'x6'6".
1—4000 gal. Haveg Vert. Tank 8'x12'.
3—7500 gal. Rubber Lined Tanks 10'x13'.
1—1500 gal. Stainless Pressure Tank, 5'x10', 90#.
1—12,000 gal. horiz. steel Pressure Tank, 7'6"x36', 200 psi.
6—Stainless Heat Exchangers; 1220, 786, 536, 370, 315, 250 sq. ft.
1—Falls Industries 100 sq. ft. Karbate Condensor.
1—24" dia. x 35', 304 S.S. Bubble Cap Column.

FILTERS

1—Oliver 6' dia. Horizontal Filter, 316 S.S.
1—Oliver 3'x6' Steel Rotary Vacuum Precoat Filter.
1—U.S. 200 sq. ft. 304 S.S. Auto-Jet Filter.
1—Oliver 5'3"x8' Steel Rotary Vacuum, vaportite housing.
1—Feinc 5'x6' Stainless Steel Rotary Vacuum Filter.
2—#10 Sweetland Filters, 27 leaves, 4" centers, 250 sq. ft.

DRYERS

1—Buflovak Vacuum Shelf with 20—60"x80" shelves.
1—Devine Vacuum Shelf with 19—59"x78" shelves.
1—Devine Vacuum Shelf with 10—40"x43" shelves.
2—Buflovak 42"x120", atmospheric double drum Dryers, complete.
2—Devine 4'x9', single drum, atmospheric.
1—Buflovak 3'x10' Rotary Vacuum Dryer.
1—Baker Perkins 5'6"x6' Rotary Vacuum Dryer.
1—Louisville 6'x45', 316 S.S. Rotary Steam Tube Dryer.
2—Louisville Rotary Steam Tube 6'x25', 6'x50'.
2—Louisville 8'x50' Stainless Steel lined Rotary Dryers.
9—Rotary Dryers 34"x30', 4'x40', 6'x50', 6'x60', 7'x80', 8'x87'.
1—Traylor 30"x18' Stainless Steel Rotary Dryer.
2—Link Belt, 7'5"x25', 6'4"x24", S.S. Louvre Dryers.
2—Atmos. Tray Dryers, 16 shelves, 40"x24".
1—P&S 10' wide Apron Conveyor Dryer 48' long.

MIXER

1—Baker Perkins 100 gal., jacketed, double arm, 30 HP.
1—Baker Perkins #16TRM, 150 gal. jktd., Vac. 60 HP.
1—Baker Perkins 50 gal. jacketed, double arm.
1—Baker Perkins 9 gal. jacketed 304 S.S. double arm.
5—Day "Cincinnatus" double arm, 250 and 100 gal.
2—Steel jacketed Powder Mixers, 225 and 350 cu. ft.
1—Patterson 6' dia. Conical Blender 15 HP.
1—500# Abbe 304 S.S. Powder Mixer.
1—3' dia. Simpson Intensive Mixer.
1—Stokes 21K, 304 S.S. Granulating Mixer 82 gals.

MISCELLANEOUS

2—1SH Mikro Pulverizers, 3 HP.
3—Abbe 2½'x3' porcelain lined Pebble Mill XP motor.
2—Abbe #4 Eureka Jar Mills 21 gals.
1—Raymond 10' dia. Single with Separator.
1—#5 Mikro Atomizer with motor and cyclone.
2—Bantam Mikro Pulverizers, S.S.
1—No. 1 Ball & Jewell Rotary Cutter.
3—Swenson Walker Continuous Crystallizers, 24"x30' sections.
2—Robinson Sifters, 40"x84", Stainless.
1—#24 Rotex Sifter, 20"x64", Quadruple deck.
1—#11 Re-ball Sifter 20"x48" 304 S.S.
8—Stokes: DD2, DDS2, T, "R", and "F" Tablet Presses.
4—Nash Vacuum Pumps: H6, TS7, #2.
25—Chlorimet, Durimet and Duriron Centrifugal Pumps, 1½" to 6".

Partial List of Values — Send for Complete Circular

TEXAS OFFICE: 4101 San Jacinto Street, Houston 4, Texas — Tel.: JAckson 6-1351

BRILL EQUIPMENT COMPANY
35-61 JABEZ ST., NEWARK 5, N.J. Tel.: MArket 3-7420

LATE MODEL QUALITY EQUIPMENT OPERATION TESTED AND GUARANTEED ON THE FMC RENTAL-PURCHASE PLAN

Recent PURCHASES of INTERESTING UNITS

2 MONEL REACTORS; 2800 Gal. 6'8" x 13'; 175# ASME Jktd. & Internal.
Struthers Wells Stainless Drum Dryers; 5' x 10' and 5' x 4' Complete.
Louisville Steam Tube Dryer; Monel contacts; 52" x 34'.
Sparkler Stainless Steel, Lithcote Lined Filter; 500 sq. ft.
Ames 300 HP Automatic Boiler; ASME 1956; No. 6 Oil Fired.
Struthers Wells Type 316 Stainless Steel Jktd. & Agt. Reactors 2000 Gal.
Stainless Steel Heavy Duty Pressure Tanks; 850 Gal. with Agitators.
9 Devine Vacuum Chamber Dryers from Lab. Size to No. J6 Double Door.
Patterson-Kelley Stainless Steel Twin Cone Blenders; 30-150 cu. ft.
Bartlett & Snow Steam Jktd. Batch Mixer 49 cu. ft. 6' Dia. 21" Deep; Scraper Agit.
Type 317 Stainless Steel Crystallizer or Pan Dryer 250 Gal. 85" Dia. x 24" Deep; Jacketed; Anchor Type Agitator; 24" Manhole.

DRYERS and EVAPORATORS

Stainless Lined Rotary Dryer; 50" x 20'; Stokes Rot. Jktd. 34" x 10'.
Double Drum Dryers by Buffalo & other makers 28" x 60" to 40" x 120".
Zaremba Double Effect INCONEL Evaporator with Calandria; 430 sq. ft.
Stainless Lined Rotary Counter Current Atmos. Dryer 50" x 20'.
Pittsburgh Lectro Dryers; Model's BAC Size 25; BWC Size 3500.
Bowen Stainless Steel Laboratory Spray Dryer; 30" x 32".
Multi Pass Jacketed 12" Screw Conveyor; 4 Sections 10' S/S Troughs.

REACTORS and PRESSURE VESSELS

Nickel Clad Reactor; 7' x 11'6"; Manhole; Jacketed and Agitated.
Lancaster Stainless Lined Rotary Reactor; 50' x 17'4"; Jktd.; 300 PSI.
Mojonnier Stainless Steel Vacuum Pans; 3' x 10'; 6' x 12'.
3 Stainless Steel Vertical Pressure Vessels 42" x 10'; Dished Heads.

PLASTIC and RUBBER EQUIPMENT

Unused Farrel-Birmingham Late Type 2 Roll Mills 14" x 30"; Uni-Drives.
Other Rubber and Plastic Mills; 16" x 42"; 18" x 42"; 22" x 60".
Calendars 2 Roll 12" x 24", 15 HP; 3 Roll 22" x 58" Complete.
Extruders by NRM, Royle, Allen, electric or oil; several sizes.
Baker Perkins Heavy Duty Double Arm Mixers up to 300 Gal. in stock.
Hydraulic Presses 36" x 36" by Dunning & Boschert, Southwark, Others.
Stokes Aut. Molding Press No. 252; Tablet Presses by Stokes, & Colton.

FILTERS and FILTER PRESSES

Shriver and Sperry Filter Presses to 42" Cast Iron, Stainless, Ni-Resist, Aluminum.
Oliver Continuous Rotary Panel Type Vacuum Filters; 8' x 8' and 8' x 10'.
Feinc String Type Rotary Vacuum Filters 6' x 6' & 8' x 10'; Stainless contacts.
Bird Young Rotary Vacuum Filter, 4' x 4'. Sweetland Pressure Filters No. 2 to 12.
Enzinger Vertical Stainless Pressure Filter; 18" x 26"; ASME; 24 sq. ft.
Stainless Nutsche Type Filter 6' dia. x 2'. Bowser Filter w/Pump; 2000 GPH; 69 sq. ft.
Enzinger Leaf Type Filter; 48" x 57" Tank with 15 leaves; 360 sq. ft. surface.

MILLS—GRINDERS—PULVERIZERS

Abbe Jacketed Steel Ball Mills, 42" x 36" with charge of balls.
International Porcelain Lined, Ball Mill 8' x 8'; 50 HP Motor.
Patterson Jacketed Ball Mill, 54" x 42"; good for Vacuum.
Mikro Pulverizers; up to No. 4's. Mikro SS Atomizers Model 5 & 6.
Fitzpatrick Comminuting Mills, Stainless Steel; Models C, D, K.
Williams Hammer Mills to 16" x 48". Raymond Imp Mills; many models.
Williams Ring Roll Lab Mills, 3 Roll. 10" x 3"; complete.
American Ring Roll Crusher with 30" x 33" Throat 50 HP Motor.

CENTRIFUGES and EXTRACTORS

Bird Continuous Conical Horizontal Centrifuges; 18" x 24"; S/S and Monel.
Sharples H2 Nozzlejector; 15 HP. Sharples Monel Model M4 P Centrifuge.
DeLaval Type 316 S/S Hermetic Separator.
Fletcher 12" and 30" S/S Centrifugals. Rubber Covered Centrifugals; all sizes.

SEND FOR "FIRST FACTS" NEW ISSUE

FIRST MACHINERY CORP.
209-289 TENTH STREET, BROOKLYN 15, N. Y.
PARKING ON THE PREMISES
Phone: STerling 8-4672
Cable Address: "EFFEMCY"

LIQUIDATION

FELDSPAR PLANT

MANCHESTER, CONN.

13—Abbe Eng. #1B 6′ x 8′ pebble mills, 30 HP motor.
2—Hardinge 7′ x 36″ conical pebble mills.
1—Allis Chalmers 6′ x 18′ pebble mill.
1—Symons 3′ shorthead cone crusher, 50 HP.
1—Buchanan 13″ x 24″ jaw crusher, 50 HP.

PHONE — WIRE — WRITE

1—Allis-Chalmers 7′ x 50′ rotary dryer, ⅝″ shell.
1—Devine vac. shelf dryer, 227 sq. ft., lithcote.
2—Buflovak Vac. shelf dryers; 110, 98 sq. ft.
1—Devine Vac. Shelf Dryer, 80 sq. ft., UNUSED.
1—York Freon 12 comp., 6 3/4 x 5, 40 HP, 1953.
1—Gardner-Denver air comp., 445 cfm at 100#.
1—1960 sq. ft. horiz. heat exchanger, T316 SS, ASME.
1—Tolhurst 48″ susp. centrifugal, T304 SS perf. basket.
3—Sharples #C-27 Super-D-Hydrators, T316 SS.
2—Sharples #C-20 Super-D-Hydrators, T316 SS.
5—A.T.&M. 40″ T304 SS Susp. centrifugals, 40 HP.
17—Sharples AS-16V centrifugals, Inconel, vaportite.
3—Sharples #16-NF cent., Non-foam, T304 SS.
1—Sturtevant #9 rot. blender, 150 cu. ft., UNUSED.
1—Sprout-Waldron 335 cu. ft. ribbon mixer, UNUSED.
2—4′ dia. spray dryers, T304 SS, pilot size, elec. heat.
1—Niagara #60-20 vert. filter, 57 sq. ft., T304 SS.
1—Niagara #53-36, 54 sq. ft. vert. filter, T304 SS.
1—Alco 110 sq. ft. vertical leaf filter, T316 SS.
2—Oliver 5′3″ x 3′ rot. vac. filter, precoat, T316 SS.
1—Oliver 5′3″ x 8′ rotary Vacuum filter. Unused.
60—T316 SS heat exchangers & condensers: 1960 sq. ft. down to 30 sq. ft.—All sizes.
1—Buflovak 42″ x 120″ dbl. drum dryer, ASME 100#.
1—Buflovak 42″ x 90″ double drum dryer.
1—Standard 3′ x 23′ rotary dryer, ¼″ welded shell.
3—2750 gal. T316 SS vert. pressure tanks, 75 sq. ft. coil, 7′ x 8′, ¼″ shell & dished heads.
1—2500 gal., T316 SS pressure tank, 70# WP.
1—17,650 gal. T316 SS horiz. pressure tank, int. coil.
60—Baker Perkins #17 200 gal. jkt. sigma mixers.
1—Baker Perkins #16, 150 gal. sigma, jkt. mixer.
2—Baker Perkins #15, 100 gal. sigma blade mixers.
2—96″ dia. Vulcan T316 SS bubble cap columns.
1—Graver 750 gal. T304 SS Kettle, ASME, 10 HP.
1—Buflovak 5′ x 12′ Vac. Drum Dryer—UNUSED.

1—Baker Perkins #15-UUMM Disp. blade jkt. mixer, 100 HP, motorized tilt, compression cover, 100 gal. 2-speed, XP motor.

PERRY EQUIPMENT CORP.
1407 N. SIXTH ST., PHILA. 22, PA.
Phone: POplar 3-3505

PROCESS EQUIPMENT DIVISION

Link Belt 502-16 Roto Louvre Dryer Oil Fired Furnace, Disch. Hood, and Drive.

Proctor & Schwartz Apron Conveyor Dryer 20 Unit, 10′-2 Tier Stainless Steel.

3 Roll #3036 High Side Raymond Mill Double Whizzer, Exhauster, Piping.

1000 sq. ft. Stainless Steel Condensers with 370-¾″x14′x16 ga. 304 S.S. Tubes.

Buflovac Vacuum Shelf Dryers, 18 Shelves, Condensers, Receivers, and Vacuum Pumps.

Louisville 8′x80′x½″ S.S. clad Rotary Dryer with Furnace, Blower, Cyclone.

4500 gal., 9′x9′x¼″, Closed, Monel Tank. 6500, 3000, 1500 gal. Haveg Tanks. 100, 200, 300 gal. S.S. Tanks.

C27 & C20 Sharples Super-D-Hydrator Vaportite 316 Stainless XP Motors.

Filter 30″x30″ P&F 36 C.I. Chambers.

30 gal. 316 S.S. Autoclave 1000 PSI Int., 319 PSI Jkt., 1½ HP Agitator.

HEAT & POWER CO. INC.
60 East 42nd St., New York 17, N.Y.
310 Thompson Bldg., Tulsa 3, Okla.

BEST BUY

ROTARY KILN

25″ x 15′ long. Complete with firing hood, discharge enclosure motor and drive. Skid mounted.
EXCELLENT CONDITION

ME MACHINERY AND EQUIPMENT CO.
123 Townsend St. · San Francisco 7, Calif.

SPECIAL

SPROUT-WALDRON
10,000# HORIZ.
SPIRAL MIXER

CENTRIFUGALS—12″, 30″, 40″ & 48″.
CENTRIFUGES—Sharples #5 & 6 S.S.
DRYERS—Hersey 5′ x 26′ Rotary Stainless
Lydon elec. heated Dryer, tray type.
Buffalo Vac. Drum Dryer 24″ x 20″.
Dispatch Ovens Elec Heated
Devine 8 shelf Vac. Dryer 40″ x 42″.
2—Hope S.S. Can Fillers pints to gals.
FILLERS—Powder & Liquid. Also Labelers.
FILTERS—Vallez type 49, with 41 Stainless covered leaves.
#2 Sweetland 12 Stainless covered leaves.
Ertel 6″ & 10″ Disc type.
FILTER PRESSES—6″ to 36″ Iron & Wood.
KETTLES—Stainless Jack. 20 to 500 gals.
Dopp 350 gal. Cast Iron Jack. Vacuum.
Devine Impreg. Units 30″ & 36″ dia.
Steel, Alum & Copper 5 to 2,000 gals.
MILLS—Raymond #00 Pulverizer 30 HP complete. Also #0000.
Mikro Pulverizer #4, 2S1, 2TH, 1SH,
Hammer Mills & Pulverizers 3 to 50 HP.
Williams #BB, #3 & #2XX Hammer Mills.
Rotary Cutters 1 HP & up.
Spr. Wald. Stainless Spike Crusher.
Pebble, Jar & Ball Mills, Lab. to 6′ x 8′.
3 Roll, 9″ x 32″, 12″ x 30″, 16″ x 40″
Lehmann 4 Roll W. C. 12″ x 36″ Steel
MIXERS—Baker Perkins 100 gal. Jack.
Day Imperial 75 & 150 gal.
Change Can Mixers 8, 15 & 40.
Day Jumbo 700 gal. horiz. Mixer.
Blystone 3000# horiz. spiral Mixer.
Day 1000# horiz. Dry ribbon Mixer.
Dry Spiral Mixers 50 to 3000#.
Lancaster 6′ dia. 25 HP & #1, 3 HP.
PUMPS—Vacuum 10 to 500 CFM.
Gould 75 HP Centrifugal 250 PSI.
SIFTERS—Day, Robinson Rotex type.
SOAP MACHINERY—Toilet, Laundry, etc.
TABLET MACHINES—Stokes Rotary RD3, Colton 4½T & 2B single punch.
TANKS—Stainless, Gl. Lined, Steel.
MISC.—Boilers Gas & Oil. Conveyors.

Partial Listings — Write for Bulletins

STEIN EQUIP'T. CO.
107 8th St., Brooklyn 15, New York
STerling 8-1944

SPECIALS

Atomizer: Mikro type 5MA, st. steel.
Disintegraters: Rietz RD18-P, steel, 75 hp.
Homogenizer-Disperser: Tri-Homo #10, #4.
Dryer: American 24x48″ dbl. drum.
Dryer: Bowen lab. spray, st. st.
Evaporator: Buflovak sgl. eff. st.st. 94 sq. ft.
Dryer: Porter 2 x 4′ vac. drum, st. st.
Centrifugal: Tolhurst 26″ rubber, 2-speed.
Mix-Muller: Simpson Porte 39½″ st. st.
Fillers: Stokes & Smith EG-1, st. st.
Centrifugal: Tolhurst 20″ type 316 st. st.
Centrifugal: AT&M 60″ st. st. perf.

Write us or call Seeley 8-1431
Send us a list of your idle machines.

LOEB EQUIPMENT SUPPLY CO.
814 W. Superior St., Chicago 22, Ill.

A SELL-OUT BEFORE MOVING

Conical Dry Mixer 192 cu. ft. vol.; 125 cu. ft. opr. vol., with 15 H.P. Unibrake Motor.
4—Werner & Pfleiderer 200 gal. jktd., sigma blade Shredders.
1—Ball & Jewell #2 Cutter.
4—Link-Belt Vibrating Screens 4′ x 8′.
1—Jeffrey Vibrating Conveyor.
1—30″ Sperry Filter closed del., 3-eye, 39-plates, 40-frames.
1—42″ Sperry Filter 40-plates, 41-frames, hyd. closing, open del.
1—International Ball Mill, porcelain lined, 48″ x 60″, 15 H.P. Unibrake Motor, 2-drums balls. Like new.
1—Schutz-O'Neill Pulverizer 22″, Style D.
1—Abbe Pebble Mill 5′ x 22′.
1—Sparkler Filter 33-S-28, with Scavenger Plate, steam jacketed.
1—2 qt. Sigma Blade S.S. Mixer.
1—250 gal. Kettle, nickel jacket, 100#.
1—Bartlett Hog Mill with 7½ H.P. motor.
1—430 S.S. Tank 3000 gal. vert. ⅜ plate, with 2 pc. cover.
2—Vacuum Pumps, Gardner-Denver, 5″ bore 4″ stroke, with 7-½ H.P. motors.
1—#316 S.S. Reactor 265 gal. jkt.
2—Twin Screw Mixers 120 gal. jkt.
2—Aetna Water Stills 20 gph, new.

Large stock of new and used H.P. Boilers, Tanks, Pumps, Heat Exchangers, Freon Compressors, Stainless Steel & Brass Valves. Advise us as to your requirements.

H. LOEB & SON 4643 LANCASTER AVE., PHILADELPHIA 31, PA.

MACHINERY & EQUIPMENT FOR CHEMICAL & ALLIED INDUSTRIES

Agitators
Attrition Mills
Autoclaves
Ball Mills
Blenders
Calendars
Carton Gluers-Sealers
Caustic Equipment
Centrifugals
Clarifiers
Coating Pans
Colloid Mills
Columns
Crushers
Crutchers
Crystallizers
Dryers
Evaporators
Expellers
Extruders
Fillers
Filter Presses
Grinders
Hammermills
Heat Exchangers
Homogenizers
Hydraulic Presses
Injection Molding
Kettles
Kilns
Labelers
Mills
Mixers
Pebble Mills
Pony Mixers
Pug Mills
Pulverizers
Presses
Pressure Vessels
Reactors
Retorts
Roll Mills
Rubber Mills
Screens
Spray Dryers
Stills
Tablet Presses
Tube Fillers
Tumbling Mixers
Vacuum Dryers
Vacuum Fillers
Vacuum Filters
Vacuum Pans
Viscolizers
Vulcanizers

OUR STOCKS AND LISTINGS ARE CHANGING DAILY
ALL INQUIRIES PROMPTLY ANSWERED

Serving the Chemical Industry for over 25 years

We Specialize in Hard to Find Items
We Buy Single Machines or Complete Plants for Cash
(We Buy - Sell - Liquidate - Appraise)

KAHN EQUIPMENT COMPANY
1650 Coney Island Ave., Brooklyn 30, N. Y. • Phone: DEwey 6-4640

EQUIPMENT
for CHEMICAL AND ALLIED INDUSTRIES

1—Struthers Wells 1000 gal. SS jacketed reactor, complete with agitator and drive, 50 psi jacket, 15 psi internal, NEW.

3—Struthers Wells 2000 gal. type 316 SS reactors, complete with impeller type agitators and drives.

1—Struthers Wells type 316 SS 400 gal. reactor, complete with coils, impeller type agitator and drive, 250 psi coils.

2—Pfaudler 300 gal. SS jacketed reactors, 75 psi jacket, 76 psi internal.

1—Pfaudler 200 gal. type 316 SS jacketed reactor, 75 psi jacket, 25 psi internal.

1—Nooter 100 gal. type 304 SS jacketed reactor with anchor type agitator.

1—Theo. Walters SS jacketed reactor, 100 gal. cap., with anchor type agitator and drive.

1—Autoclave Engineers type 316 SS, 1 gal. autoclave complete with agitator and drive, coils 1200 psi W.P.

1—Stainless steel 18,000 gal. pressure tank, 60 psi.

2—Storage tanks type 316 stainless steel, 4500 gal.

2—Pfaudler 500 gal. Series R 60 glass lined jacketed reactors, with impeller type agitators, baffle and drive, NEW.

1—Stainless steel vertical 3000 gal. storage tank.

1—Pfaudler 300 gal. Series R glass lined jacketed reactor with impeller type agitator, baffle and drive, NEW.

1—Pfaudler 100 gal. Series ES glass lined jacketed reactor complete with anchor type agitator, drive and motor, 85# jacket, with full vacuum.

1—Pfaudler 50 gal. Series ES glass lined jacketed, reactor, complete with anchor type agitator and drive, 75# jacket, 25# internal.

1—Pfaudler Series P 30 gal. glass lined jacketed kettle, 95# jacket, 25# internal, NEW.

1—Pfaudler Series P 20 gal. glass lined jacketed reactor, complete with impeller type agitator and variable speed drive, 100# jacket.

1—Leader 200 gal. glass lined jacketed reactor, 135 psi jacket, full vacuum.

6—Pfaudler 1000 gal. glass lined storage tanks.

1—Cole 18,000 gal. aluminum storage tank.

8—Western States 40" type 316 SS suspended type centrifuges with perforate baskets, plows and 40 HP motors.

1—Eastern 7000 gal. aluminum storage tank.

1—Hersey SS rotary dryer, 18" x 12', complete.

4—Stainless steel rotary dryers, 4' x 20', 6' x 50' and 8' x 40'.

1—AT&M 40" SS suspended type centrifuge complete with perforate basket, plow and motor.

2—Tolhurst SS 48" suspended type centrifuges complete with perforate basket, plows and motors.

1—Fletcher 48" type 316 SS whirlwind centrifuge complete with perforate basket, SS curb and motor.

1—Oliver SS pressure precoat filter, 5'3" x 8'.

1—Oliver SS rotary vacuum precoat filter, 3' x 4'.

1—GATX type 316 SS rotary filter, 2' x 6".

2—Girdler SS jacketed heating votators, 10" x 62".

2—Girdler SS jacketed cooling votators, 24" x 6'.

1—Acme type 316 SS packed column, 2' x 31'9".

1—Buflovak SS rotary vacuum dryer, 3' x 15'.

5—Davis Engineers Carpenter 20 heat exchangers, 125 sq. ft., ASME N.B.

1—Bird SS continuous centrifugal filter, 18" x 28" with 15 HP motor, NEW.

R. GELB & SONS, INC.
UNION, NEW JERSEY Est. 1886 MUrdock 6-4900

ECH SPECIALS

Bird 18"x28" Continuous Cent. Filter. Day 40 gal. Pony Mixer, w/5 HP motor. Day #4 gearless 80 gal. Pony Mixer, 10 HP. Day #5 Cinn. Mixer, sigma arms, 7½ HP. Gruendler "BB" Whirlbeater Hammer Mill. Abbe 5'x6' Jktd. Ball Mill, chr. mang. steel. Pfaudler 1500 gal. Glass Tank; closed top. Rotex 20"x48" Sifter; on stand. ½ HP mtr. 2 Preformers, Stokes RB2 & Colton #5½. 3 B&J Cutters, size ½—lab. & midget.

WE BUY COMPLETE PLANTS OR SINGLE UNITS
New Machinery Div. for New Fabrications
Tel. SOuth 8-4451—4452—8782
YOU CAN BANK ON
Equipment Clearing House, Inc.
111 33 Street, Brooklyn 32, N.Y.

2—OLIVER PRESS. PRECOAT FILTERS 5'3" x 3'—Type 316 S.S.
4—RIBBON BLENDERS, 2500 gallons, 1350 gallons.
2—AUTOCLAVES S.S., 50 gal. 2000 lb., 3½ gal. 2000 lb.
1—DRUM DRYER, Proctor & Schwartz.
2—COLLOID MILLS, 5 HP EX-PR. 1 HP.
1—#4 MICRO PULVERIZER.

MACHINECRAFT CORPORATION
800 WILSON AVE., NEWARK 5, N. J.
MITCHELL 2-7634

MACHINERY ANYONE?

1—Stainless Steel 23 cu. ft. Ribbon Blender.
1—Oliver 74"x51" S.S. Rotary Vac. Filter.
1—Kent 12x30" three Roll Mill, 15 h.p. mtr.
1—Premier 8" Colloid Mill, 30 h.p. mtr.
2—Kent 20 & 60 gal. "Super" Change Can Mixers, motor driven.
4" Glass Lined Pipe, Elbows & Tees.
1—Duriron 2" Cent. Pump, 5 h.p. mtr.
1—Sharples Type M318 Super Centrifuge.
1—R. C. Blower, vee belt drive, 50 h.p.
Hammer Mills, Vacuum Pumps, Agitators.
WHAT DO YOU HAVE FOR SALE?
BILL WOLF, Inc.
2708 CAROL ROAD UNION, N.J.
MUrdock 6-8883

FOR IMPOSSIBLE BUDGETS

STAINLESS SPRAY DRYER

10' dia. Swenson Stainless Spray Dryer complete including Pangborn Dust Collector. In excellent condition.

PRICED TO SELL

Wire or phone collect—GA 1-1380

ME MACHINERY AND EQUIPMENT CO.
123 Townsend St. - San Francisco 7, Calif

BUY with Confidence

SERVICE-DEPENDABILITY-DIVERSITY

PRIME MACHINERY

1—Abbe 300 gallon double arm mixer, sigma blades.

3—Stainless steel tanks, 1200, 1000, 150 gallons.

1—600 gallon glass lined tank.

2—Stokes rotary vacuum dryers 18" x 42", 2½' x 8'.

2—Steel ball mills, 250 and 50 gals.

4—Stokes vacuum pumps, 100, 50, 19, 15 CFM.

3—Stokes tablet presses, models F, R, RD-3.

1—International 10 cu. ft. stainless steel double cone blender.

4—Double spiral ribbon blenders, 1000, 1200, 2000, 7500#, steel and stainless.

1—3' x 24' gas fired rotary dryer.

1—12" x 12" stainless steel filter press.

1—Readco 25 gallon stainless steel sigma bladed double arm vacuum mixer.

6—Rotex sifters, 20"x48", 40"x84", 40"x120", single and double deck.

Write or Phone Your Inquiries

CP chemical & process machinery corp.
52 Ninth St.
Brooklyn 15, N.Y.
HYacinth 9-7200

SURPLUS: From Dismantlement at:

RICHMOND, VA.

4—30" Sperry Filter Presses, 32 Chambers, NICKEL or NI-RESIST Plates.

2—250 Ton Swenson Acid Bath Evaporators, RUBBER-LINED, Complete.

2—Rietz Disintegrators, Model RD-18-P, 75HP.—3/60/440.

1—Whitlock #17 STAINLESS Heat Exchanger, Type S, Two Pass, "304" ⅝" tubes, 60# press., Steel Shell, Wgt. 1,700#.

8—Baker-Perkins Vissolvers, Size 2-G, 950 Gals., 30 HP Motor—Falk Reducer Drives.

1—Griscom-Russell STAINLESS Heat Exchanger, 1" x 18 ga. Tubes, type 304, 16" dia. tube Bundle, Wgt. 2,000# Steel Shell.

1—375 Sq. Ft. Patterson Kelly STAINLESS Heat Exchanger, 1953 built, Steel Shell, 2" Tubes, 300# Shell pressure, 75# tube press.

6—98, 134, 175 and 635 Sq. Ft. Ross Steel Heat Exchangers, ⅝" to 1-¼" tubes, 50, 65, and 100# pressures.

ALSO:
12 Viking Pumps, 6 Gearmotors, 15 Centrifugal Pumps, & Splashproof Motors, (7-½ HP). 6—10 HP Gearmotors, 4—3" x 3" Viking Pumps (only), 8 Nickel & Hi-Ni-Alloy Pumps & Motors & Numerous Other Items.

PRICED FOR QUICK SALE

ROSENTHAL
1841 N. Second Street. Philadelphia 22, Penna. REgent 9-2816-17

Business Wants and Offers

RATES PER INSERTION—PAYABLE IN ADVANCE (Not Subject to Agency Commission)

ALL CLASSIFIED ADVERTISEMENTS—$6.00, thirty-six words or less: $1.00 for each additional six words or fraction.

NO DISPLAY—First two words printed in bold face type.

COPY DEADLINE—Wednesday Noon Preceding Date of Publication

Send replies to ads with box numbers to
OIL, PAINT AND DRUG REPORTER, 30 *Church St., New York 7, N. Y.*

BUSINESS OPPORTUNITIES

Chemical investment opportunity. Chemist (male or female) required who is interested in locating in South Central Texas and able to invest in an interesting, varied and profitable new industry. OPD 978.

EQUIPMENT OFFERED

For Sale: 40" and 26" Tolhurst suspended perforated Centrifuges; 700 sq. ft. S.S. T304 Buffalovak Double Effect Evaporator; 1550 sq. ft. S.S. T304 Mojonnier Triple Effect Evaporator; 150 sq. ft. S.S. T304 Single Effect Evaporator; 1500 and 3000 gal. S.S. Vacuum Tanks with coils; 1000 G.P.H. stainless Homogenizers; 42" x 120" and 42" x 90" Double Drum Dryers. Best Equipment Company, 1737 W. Howard St., Chicago 26, Ill. AM 2-1452.

Used Walk-In Refrigerator ice box, cork insulated, with compressor and coils 5½' x 5½'. OPD 979.

EQUIPMENT WANTED

Chemical Company planning expansion seeking stainless, nickel and alloy processing equipment for lab pilot plant and commercial production. Will consider purchase of complete plant or other suitable arrangements. Prompt action offered in confidence. OPD 976.

MATERIALS OFFERED

Pour Depressant: 500,000 lbs. recovered Paraflow possessing original strength for oils, residual fuels, etc. Offered in bulk or drums, low price. OPD 977.

Plasticizer: Lowest priced primary phthalate plasticizer; excellent solvation and efficiency, excellent compatibility with secondary plasticizers. Regularly available in transport trucks or drums. Mercury Chemical Corp. Edison, N. J. Liberty 8-1540.

POSITIONS OFFERED

Biochemist-Enzymologist. Small but rapidly expanding biochemical company offers an unusual opportunity for a well-qualified individual capable of taking complete responsibility for research and product development. Ph.D. with commercial experience preferred but not essential. Now manufacturing base cultures and extracted enzymes for agricultural, baking and other industrial uses. Send complete resume and salary requirements with first letter. All replies treated in strictest confidence. Our employees know of this ad Address: OPD 975. Oil, Paint and Drug Reporter.

Aluminum Condenser, 350 sq. ft.
4—24" Filter Presses, Stainless Steel fittings, wood frames.
1—24" Filter Press, open delivery.
1—Procter & Schwartz finned Drum Drier.
Continuous Stripping Column 2 x 13.
Aluminum Evaporator, Calandria type, 1300 sq. ft.
Ribbon Blenders, Hydraulic Pumps.
MACHINECRAFT CORP.
800 Wilson Avenue, Newark 5, New Jersey
Mitchell 2-7634

SURPLUS CHEMICALS BOUGHT
CHEMICALS • COLORS
PLASTICS • RESINS
INSECTICIDES • PHARMACEUTICALS
CASH OFFERS
Efficient Service • Confidential
Write, Wire, Phone
Rambach Chemical Company
93-03 Sutphin Blvd., Jamaica 35, N. Y., AXtel 7-8900
Cable Address • RAMBACHEM

EQUIPONOMICS
BIRD Continuous Centrifuges 18" x 28" 316 S.S. (1952) 15 H.P. Washing
COLUMN S.S. 32" D x 25' high, 28 plates.
OLIVER VACUUM FILTER—S.S. 316, 3'x6'
KARBATE HEAT EXCHANGER—40 sq. ft.
FITZ MILL Model D, S.S., 7½ H.P.
HEAT EXCHANGER—S.S. 500 sq. ft.
DEVINE VAC. PUMPS—115 cfm. (2).
TOLHURST—30" S.S. Centrifuge, 3 H.P.
EVAPORATOR—Single effect. S.S. VRC, 90 sq. ft., Blaw Knox 1953. Complete.
PROCESS PLANTS SERVICE, INC.
287 Central Ave., Clark, N.J. Tel. FUlton 1-1183-4

WANTED!
CHEMICALS—DYES
PHARMACEUTICALS
SOLVENTS—OILS
INTERMEDIATES
PLASTICIZERS—WAXES
PIGMENTS—COLORS
PACKAGED ITEMS
EQUIPMENT—PLANTS
BY-PRODUCTS
SELL NOW!
TURN INVENTORIES INTO CASH!
Chemical Service Corporation
88 BEAVER ST., NEW YORK 5, N.Y.
Tel. Hanover 2-6970
Cable address "RETORTS" N. Y.

Modern Rebuilt Machinery
UNION Rebuilt Machinery Established 1912
At Bargain Prices
Werner & Pfleiderer 3,000 gal. and 3,500 gal. Jacketed Double Arm Mixers.
Baker Perkins and Day 50 and 100 gal. Stainless Steel Double Arm Mixers.
Day 50 gal. Gearless Pony Mixer.
Kent 5 Roll High Speed Mill.
Sperry & American Seitz Stainless Filters.
Knapp Wraparound Labeler.
Stokes & Smith 90D Auto. Tube Filler.
Colton 6 ft. Stainless Steel Blending Pan.
Mikro Pulverizers, 1SH, 2TH, 3TH, 4TH.
PACKAGING—Pneumatic Scale Lines with Tite Wrap. Palmer Box Forming Machines. Ceco Sealers. Standard Knapp, A-B-C, Ferguson Carton Sealers.
WRAPPING—Package Machinery, Hayssen, Battle Creek, Scandia, Campbell, Wrap King, Pak-Rapid. All sizes and models.
OVER 5,000 MACHINES IN STOCK—Mixers, Labelers, Dryers, Fillers, Sifters, Grinders, Cappers, Pulverizers, Packaging Machines, Carton Sealing Machines.
Complete Details & Quotations on Request
Union Standard Equipment Co.
318-322 Lafayette St., New York 12, N. Y. Canal 6-5333
163-167 N. May St., Chicago, Illinois Seely 3-7845

FOR RENT
Fully equipped liquid storage plant. Gravity Feed from railroad siding to 3 tanks with a capacity of 25,000 gallons each tank. Can handle any type liquid up to 140 octane. Double loading rack. Also facilities for storing cans, drums and warehousing. Unrestricted.
ANCHOR, INC. SPruce 6-2230
213-19 99th Ave. • Queens Village 29, N. Y.

"Geared to Serve You"
F. J. Stokes Model F Tablet Presses—MD.
Patterson-Kelly 20 cu. ft. twin shell Blender.
Stokes & Smith Stainless Powder Filler.
Stokes #2 Gear Filler—MD.
Dry Powder Mixers—100, 200, 400, 1000 lbs.
Colton #1 & #4 Granulators—one S S.
Sparkler 18D6 jacketed Filter.
Lee 100 gal. Stainless Kettle—Vac Cover.
Ross 20 gallon Pony Mixer.
Mikro Pulverizer, Model 1SH—5 HP.
Charlotte Stainless Lab Colloid Mill—MD.
Chisholm Ryder Model C-10 Labeler—MD.
Patterson 10 cu. ft. stainless twin shell.
We Buy or Trade—Send Us Your List
JASPER MACHINERY CO., INC.
282 SIXTH STREET BROOKLYN 15, N.Y.
STerling 8-8308

DON'T BUY ANY OF THESE ITEMS UNTIL YOU GET OUR LOW PRICES!
WE CARRY A LARGE STOCK OF GOOD USED AND REBUILT CHEMICAL, FOOD AND PAINT PROCESSING EQUIPMENT

PUMPS	FILTERS	AGITATORS	PEBBLE MILLS
TANKS	KETTLES	DISPERSERS	VACUUM PUMPS
STILLS	FILLERS	CENTRIFUGES	ROLLER MILLS
MIXERS	BLENDERS	HOMOGENIZERS	PULVERIZERS

GENERAL EQUIPMENT & TRADING CO., 2633 W. Grand Ave., Chicago 12, Illinois

Oils, Fats and Waxes

—Continued from page 62

in most markets. Processors complained of poor margins and were not pressing for new business at current levels. Hog and poultry feed business was good but mixers held purchases to nearby requirements when balances ran out. Meal, 44 percent, was quoted at $52 a ton, unrestricted, bulk, Decatur, for prompt shipment.

Waxes, Vegetable

Moderate inquiry was reported for carnauba grades, with actual trading spotty, chiefly for prompt requirements. Prices were unchanged and fairly steady for most grades, except yellows which were unsettled and off 2c. per pound. No. 1 yellow Ceara was lower at $1.02 to $1.03 per pound, spot, as to quantity and Parnahyba, $1.03 to $1.05, according to quantity. Fatty grades were unchanged. No. 3 Ceara crude ranged from 73c. to 74c per pound, spot, as to quantity and Parnahyba, $1.03 to $1.05, same basis.

There was no improvement in the tight supply condition of candelilla wax. Sales were limited to small lots and took place at 65c. to 66c. per pound, spot, as to seller and buyer. Imports from Mexico were nil last week and shipments of late due to arrive have been behind schedule. Prospects of early improvement in the supply situation were not considered good according to trade sources.

Firmer tone developed in Japan wax owing to higher cost of replacements brought about by reports of the shortage of new crop. Prices were raised 2c. to 29c. to 31c. per pound, spot as to quantity.

Rumania Developing

—Continued from page 7

ture of insecticides, all within the integrated Borzesti Chemical works.

At Braila, the country will have a new cellulose plant using locally-grown reeds as feedstock. A factory to produce semicellulose from straw is under construction at nearby Palas-Constantza; and several small factories are planned for manufacture of drugs, plastics and carbon black.

Before long, the Chamber of Commerce report states, "Rumania will produce substantial quantities of synthetic yarns, and fibers, synthetic rubber, nitrogen fertilizers, cellulose and paper, plastics, solvents, plasticizers and other chemical products.

Blinking but not awed by the bustling twentieth century, Rumania—until just yesterday a land of farmers and small trades people—means to make a name for itself in the industrial world.

"In brief," the report concludes, "the Rumanian chemical industry is to assume full flourish, Rumania thus becoming a leading producer and exporter of chemical products."

Dixon Eyes Drug Field

—Continued from page 7

ment whereby the Bloomfield, N. J., firm will do the following:

- Provide advisory and consulting services to Kaltman.
- Purchase 100,000 shares of Kaltman stock at $500,000.
- Agree to buy another 500,000 shares of Kaltman stock at $6.50 per share within a three-year period.

Dixon Chemical's stock interest in Kaltman marks its first step outside the basic chemicals field. President Arthur W. Dixon, jr., whose firm bills itself as the largest supplier of merchant sulfuric acid on the eastern seaboard, says that this represents the beginning of a major move into the drug industry.

Essential Oils

—Continued from page 55

the Mediterranean. Labor costs, though, put this European material out of reach for most users of petitgrain.

The bulk of the oil, therefore, comes from Paraguay. There the industry had its beginning in 1880 when a botanist from France started planting petitgrain.

Right away the oil became a sought-after ingredient in perfume due to its strong and refreshing odor.

According to agricultural reports, the months in which the most oil is produced are from September to March or April. The best quality oil, however, is produced from January to June or July.

Sandalwood—From its previous low, $18.25 per pound, the oil has advanced to $19 per pound.

Aromatic Chemicals

Styrolyl Acetate—The price is reported to be weakening. The OPD range, however, remains at its previous level, from $1.20 to $1.45 per pound.

Terpinyl Propionate—The low of the range declined last week from $1.75 per pound to $1.70 per pound.

Seeds and Spices

Cassia—Material from Batavia and Korintje is reported to be attracting interest because of its rather low price. Material from Saigon, however, is strengthening because stocks are reported to be light.

Cloves—Both Zanzibar and Madagascar material are listed at the lowest prices of the year.

Ginger—Prices for Jamaica material have firmed and the market is expected to continue strong when demand picks up. Material from Africa and Cochin is steady. Nigerian is at bargain prices.

Paprika—Spain's shipping season is over and broader demand in certain areas has been reported. High quality material is said to be scarce. Low quality material is being sought after.

Pepper—Malabar and Lampong black and Muntok white peppers all were reduced in price last week. Malabar came down from 57c. per pound to 56c. per pound; Lampong came down from 57c. per pound to 56c. per pound and Muntok white came down from 77c. per pound to 75c. per pound.

Bids Wanted

Nitrous Oxide, indefinite quantities. For period beginning July 1, through June 30, 1961. Delivery to Naval Supply Center, Bayonne, N. J. Bid IFB-N 140-7311-60, June 17. US Navy Purchasing Office, Third Ave. and 29th St., Brooklyn 32, N.Y.

Sodium Chloride, tech., mineral type, 2,449,300 lbs., processed size in accord with Type II, Grade A Fed. Spec. Deliveries to AFB 2300, Building 2, Area C, Door 1, Wright Patterson Air Force Base, Ohio. Bid IFB 33-601-60-381B, June 21. The proposed procurement will as far as possible utilize firms located in labor surplus areas. Contracting Officer Procurement Division, Attn.: EWMP Bldg. 120, Wright Patterson Air Force Base, Ohio.

Insecticides, Chlordace, liquid form, various quantities. Deliveries to various destinations. Bid IFB N140-680-60B; **DDT,** liquid form, various quantities to various destinations. Bid IFB N1140-677-60B, June 15. US Navy Purchasing Office, Third Ave. and 29th St., Brooklyn 32, N. Y.

– WANTED FOR CASH –
Off Spec. Job-Lot Discontinued / SURPLUS Used or Spoiled — Glycols (Any Type) • Plasticizers • Vegetable—Animal Oils Solvents • Chemicals • Raw Materials & Finished Goods
Drum Lots to Tanker Lots . . . Any Quantity
Don't Throw Away Materials Which Are Seemingly Useless . . See Us First ! !
HIGHEST SPOT CASH PRICES PAID
CHEMSOL, INC., • Washington Ave. & Franklin St., New Market, N. J. • FLanders 1-3010 PLymouth 2-1140

we will buy your...
SURPLUS CHEMICALS
SOLVENTS • WAXES • OILS
RESINS • DRUGS • COLORS
WIRE OR PHONE FOR IMMEDIATE ACTION
All offers held in strictest confidence
Barclay CHEMICAL COMPANY, INC.
77 VARICK STREET NEW YORK 13, N.Y. WO 6-4533

Acme Hardesty Co. 61
Alan Wood Steel Company 48
Allied Chemical Corporation, General Chemical Division 25
Allied Chemical Corporation—Plastics & Coal Chemicals Division 45
Allied Chemical Corporation Semet-Solvay Petrochemical Division 62
American Agricultural Chemical Co., The .. 1
American Cyanamid Company, Process Chemicals Department 36
American Lignite Products Co. 61
American Mineral Spirits Company 68
American Potash & Chemical Corporation .. 29
Amoco Chemicals Corporation 26
Anchor Inc. 66
Archer-Daniels-Midland Company, Chemical Products Division 62
Armour Pharmaceutical Company 50
Ashcraft-Wilkinson Co. 40

Baker, J. T., Chemical Co. 1
Barclay Chemical Company, Inc. 66
Bareco Wax Co., Division Petrolite Corporation 39
Becco Chemical Division Food Machinery & Chemical Corp. 35, 37
Berk, F. W., & Co., Inc. 36
Berkshire Chemicals, Inc. 36
Better Finishes & Coatings, Inc. 34
Biddle Sawyer Corp. 57
Bios Laboratories, Inc. 51
Blockson Chemical Company 38
Bower, Henry, Chemical Mfg. Co. 34
Bowman, Charles, & Co. 33
Brill Equipment Company 63
Brode Corporation, The 62
Bunge Corporation 62

Celanese Corporation of America, Chemical Division 68
Chemical & Process Machinery Corp. 65
Chemical Service Corp. 66, 68
Chemical Solvents, Inc. 68
Chemsol, Inc. 66
Columbia Southern Chemical Corporation .. 34
Commercial Solvents Corporation 6
Concord Chemical Company 68
Connelly, Inc. 48
Conray Products Co., Division Chemical Service Corp. 40
Coupe, Robert A. 37
Cowles Chemical Company 68

Devold, Peder, Oil Company Division, Chas. L. Huisking & Co., Inc. 51
Distillation Products Industries, Div. of Eastman Kodak Company 43
Dixon Chemical & Research, Inc. 8
Dow Chemical Company, The 37, 41, 49, 51
Dunkel, Paul A., & Company, Inc. 51
DuPont de Nemours, E. I., & Co. (Inc.) .. 45, 46
Duval Sulphur, & Potash Co. 40

Eastman Chemical Products, Inc. 16, 60
Emery Industries, Inc. 61
Equipment Clearing House, Inc. 65

Fezandie & Sperrle 59
Filter Fabrics, Inc. 60
First Machinery Corp. 63
Florasynth Laboratories, Inc. 55
Foote Mineral Co., Inc. 18
Fritzsche Brothers, Inc. 55
Frontier Chemical Company 43

Gane's Chemical Works, Inc. 53
Gelb, R., & Sons, Inc. 65
General Equipment & Trading Co. 66
Gillespie-Rogers-Pyatt Co., Inc. 60
Greeff, R. W., & Co. 1, 57
Gulf Oil Corporation 46

Harchem Division, Wallace & Tiernan, Inc. 43
Harshaw Chemical Co., The 15, 49
Heat & Power Co., Inc. 64
Hercules Powder Company, Incorporated .. 17
Heyden Chemical Division, Heyden Newport Chemical Corporation 24
Hoffmann-La Roche, Inc. 50, 57
Hooker Chemical Corporation 35
Hostawax Company 62
Hutchinson, D. W., & Co., Inc. 55

International Petrosolvents, Inc. 42

Jasper Machinery Company, Inc. 66

Kahn Equipment Company 64
Kay-Fries Chemicals, Inc. 42
Koppers Company, Inc., Tar Products Division 44

Lawler Company 62
Lebanon Chemical Co. 40
Lemke, B. L., & Co., Inc. 53
Lever Brothers Company 41
Loeb, H., & Son 64
Loeb Equipment Supply Co. 64
Lucidol Division, Wallace & Tiernan, Incorporated 43
Lueders, George, & Co., Incorporated 55

Machinecraft Corp. 65, 66
Machinery & Equipment Company 62, 64, 65
Machinery & Equipment Co., The 62
Magnus, Mabee & Reynard, Inc. 55
Mallinckrodt Chemical Works 22, 23
Manion Steel Barrel Company 35
Michigan Chemical Corporation 13
Minute Maid Corporation, Citrus Products Division 54
Mississippi Lime Company 35
Mutual Citrus Products Company 20

National Casein 60
Newark Steel Drum Co. 48
New Jersey Zinc Company, The 38

Olin Mathieson Chemical Corporation Chemicals Division 42
Oronite Chemical Company 11

Pan American Sulphur Company 36
Pennsalt Chemicals Corporation, Industrial Division 1
Pennsylvania Industrial Chemical Corp. 59
Pennsylvania Refining Company 38
Perry Equipment Corp. 64
Philadelphia Quartz Company 38
Philipp Brothers Chemicals, Inc. 35
Pittsburgh Chemical Co., Industrial Chemicals Division 47
Plastics and Coal Chemicals Division, Allied Chemical Corporation 45
Potash Company of America 40
Prior Chemical Corporation 1
Process Plants Service, Inc. 66
Procter & Gamble Co. 41
Publicker Industries, Inc. 42
Pure Carbonic Co. 36

Rambach Chemical Company 66
Raney Catalyst Co. 41
Read, Chas. L., & Co., Inc. 59
Reichhold Chemicals Inc. 27
Republic Steel Corporation 45
Richter, Gedeon Pharmaceutical Products, Inc. 51
Rohm & Haas Company 42
Rosenthal's, Joseph, Sons, Inc. 65
Ross F. H., & Co. 38
Ross, Frank B., Company 62

Signal Oil and Gas Company, Houston Division 39
Foster D. Snell, Inc. 68
Stauffer Chemical Company 37
Stein Equipment Co. 66
Sterwin Chemicals, Inc. 58
Strohmeyer & Arpe Co. 61
Sunkist Growers, Inc. 21
Syntex Chemical Company, Inc. 31

Taconic Natural Oils Co. 57
Tennessee Corporation 37
Texas Gulf Sulphur Co., Inc. 38
Turner, Joseph, & Co. 40

Union Carbide Chemicals Company, Division of Union Carbide Corporation 2
Union Standard Equipment Co. 66
U. S. Borax & Chemical Corporation 1
U. S. Industrial Chemicals Company, Division of National Distillers & Chemical Corporation 28a, 28b
U. S. Steel Corp. 46
United Ultramarine & Chemical Company, Inc. 60
Upjohn Company, The 53

van Ameringen-Haebler, Division of International Flavor & Fragrances, Inc. 56
Vanadium Corp. of America 32
Verona Aromatics, A Division of Verona-Pharma Chemical Corporation 57
Verona-Pharma Chemical Corp. 48
Vitro Chemical Company 37

Western Condensing Co. 19
Will & Baumer Candle Co., Inc. 61
Witco Chemical Company, Inc. 59, 60
Wolf, Bill, Inc. 65
Wyandotte Chemicals Corporation 43

Advertisers' Index

OPD's Advertising Staff

PRODUCTION: Claire Shannon

BUYERS DIRECTORY: Helen Lohse

NEW YORK (RE 29820)—Alexander Kane, Edwin F. Novy, Bronson Philhower.

CLEVELAND (LOng 1-0544)—Henry G. Seed, 17717 Lomond Boulevard, Cleveland 22, Ohio

MIAMI (FRanklin 9-2668)—John Printup & Associates, Langford Building, Miami 32, Fla.

DALLAS (DAvis 1-0898)—John Printup & Associates, 2607 Millmar Drive, Dallas 28, Tex.

LOS ANGELES (DUnkirk 7-4388)—Robert W. Walker Company, 730 South Western Avenue, Los Angeles 5, Calif.

SAN FRANCISCO (SUtter 1-5568)—Robert W. Walker Company, 57 Post Street, San Francisco

Trade Name Chemicals

—*Continued from page 49*

tions. **"Lorol 20"** and **"22"** are essentially n-octyl and n-decyl alcohols, respectively.

"Lorol 24," cetyl alcohol, is a white, waxy solid which meets NF specifications. **"Lorol 28,"** stearyl alcohol, is available in technical and USP grades and is also a white, waxy solid.

Softening Agents

Antara Chemicals markets **"Soromine"** softeners for use in the textile industry. **"Soromine BNS"** is a cationic softening agent for application on cotton, viscose or acetate rayon, wool, nylon and silk fabrics to impart a full, non-oily finish. The material is reported well suited to softening of yarns, hosiery, knitted fabrics and flat goods and can be applied either by padding or long form liquors. The material is also recommended as a softener for incoporation into crease resistant resin finishes on cotton, rayon and mixed fiber fabrics. Material is a fatty acid amide complex.

"Soromine FW" is an anionic textile softening agent in the form of a water white soluble paste. Antara says the material causes no discoloration of bleached white or dyed yarns, stock and piece goods, and does not yellow during high temperature drying. The material is suited to softening and lubricating of cellulosic fibers and can be applied from a long liquor, by padding or in direct color dye-baths. The material is the sodium salt of a fatty amide complex.

Nopco Chemical Company supplies **"Nopcotex AR-35"** as a cationic softener for cotton and synthetic fabrics. The company points out that the material is especially suited to application in finishing acrylic knit goods. It is a good finish for towelling where softness and water absorbancy are major requirements. The material also is reported effective on polyester, polyamide and newer synthetics where extreme softness is desired.

Unlike many cationics, **"Nopcotex AR-35"** does not build up water repellancy in the fabric, the company reports. Some care must be taken in choosing other finishing agents to be used with this material, but it has been shown to be compatible with selected fluorescent dyes, corn starches and starch ethers, polyvinyl alcohol and acetate, as well as most thermosetting resins.

Surfactants

In chemical types of nonionic surfactants of commercial importance, products made by reacting alcohols with ethylene oxide are among the oldest and were for many years among the most widely used. Principal alcohols used in making these surfactants include naturally derived fatty and resin alcohols, synthetic lipophilic alcohols and hydrophilic polyhydric alcohols. Ethylene oxide, the other main component, is made from ethylene obtained from natural gases or from petroleum refining.

The reaction by which most alcohols are converted to nonionic surfactants consists of adding hydrophilic ethoxy groups to a hydroxyl group of an alcohol by condensation with ethylene oxide to form ethers. A molecule of ether thus formed reacts with additional molecules of ethylene oxide to form polyoxyethylene ethers.

As is true of all surfactants, the surface activity of nonionics derived from alcohols results from the presence of both lipophilic and hydrophilic groups in the molecule. In some cases the alcohol contributes the lipophilic group with the ethoxy groups of the ethylene oxide providing the hydrophilic content of the ether.

The great number of possible combinations of lipophilic and hydrophilic components available in preparing alcohol-ethylene oxide nonionics gives rise to the problem of selecting the lowest cost materials available that will give the desired characteristics. Choice of hydrophiles is essentially limited to ethylene oxide either alone or in combination with polyhydric alcohols, depending on whether an ether type or an ester type product is wanted.

In selecting lipophiles for nonionic surfactants, ether type products are derived from lipophilic alcohols and ether-ester types from fatty acids. Lipophilic alcohols derived from naural fats and oils were among the first materials used in making ether surfactants. Fatty alcohols most commonly used in ether type nonionics are lauryl, oleyl, tallow, cetyl and hydroabietyl. For producing fatty ethers, lauryl alcohol is probably consumed in the greatest volume since its ethers are used as both nonionic surfactants and as intermediates for sulfation to form anionic surfactants.

Atlas Powder Company markets an extended line of polyoxyethylene surface-agents such as the **"Tween," "MYRJ," "G"** and **"Renex" series.**

Additives: Washington's

—*Continued from page 7*

prolonged administration conditions which would never occur under any but laboratory conditions.

Notwithstanding, the committee emphasizes its belief that "recent federal legislation in this field provides an adequate legal framework for maintaining the safety and quality of the nation's food supply."

Coatings Materials

—*Continued from page 59*

be the beginning of an upward movement in the prices of the phthalate plasticizers. One producers announcement calls for an average of ½ to 2 cents per pound increases. Dibutyl phthalate will be 28½ cents per pound, tankcars, dimethyl phthalate will go to 26½ cents per pound and dioctyl phthalate is scheduled to go from 25 cents per pound to 26 cents per pound. Prices are on the basis of tankcars, and become effective July 1 on both spot and contracts.

Miscellaneous

Casein—Market conditions for Argentine casein was reported to be slightly firmer against reports that stocks in the Argentine were reduced. Prices held in the 19¾ to 20¼ cents per pound range. Polish, New Zealand and Australian casein are holding in the same price range, unchanged over the past few weeks. No appreciable change in the stocks of casein is noted this week.

It looks as though the battle to retain the suspension of the import duty on casein has finally paid off. Casein men will not feel completely at ease until the bill bears the President's signature. Nevertheless, progress on the bill gives many in the trade reason to be hopeful.

Last week the bill was reported to be out of committee. Originally the bill went before the joint committee of members of the house and senate to iron out the differences of opinion that centered on the amendment that called for an adoption of a 2¾ cent per pound duty on edible forms of imported casein. The snarl of red tape that would have resulted from this artificial division was roundly denounced by custom's officials and trademen alike.

The joint committee reported the bill out minus its abnoxious amendment. It does provide for a 2¾ cent per pound duty on imported caseinates. The latter is not seen as hard to take as a duty on edible casein would have been, most sources maintain. Passage seems assured, but trademen will be keeping their fingers crossed until the bill becomes law.

Glue—The Bureau of Census reports that production of animal glue 8,721,000 pounds. This is well below the 10,365,000 pounds reported for March and the 9,237,000 pounds produced in April of last year. Shipments during April were 8,296,000 pounds, almost unchanged from the total for the previous month. Last year for the same month, shipments were 10,146,000 pounds. Stocks during April went from 33,988,000 pounds at the beginning of the month to 34,413,000 pounds at the end of the month.

Total bone glue production was 3,955,000 pounds, down from the previous month's total of 4,997,000 pounds. Shipments of bone glue were 4,274,000 pounds. During March, shipments of bone glue accounted for 5,031,000 pounds. Stocks of bone glue were estimated to be 12,530,000 pounds, roughly unchanged from the previous month's total.

Naval Stores

Rosin, Gum

(USDA, per 100 lbs.)

	Fri. June 3	Mon. June 6	Tues. June 7	Wed. June 8	Thurs. June 9
Drums—					
M	...	...	...	$12.50	...
WG	$12.94	$13.12	...	13.25	...
WW	13.19	...	...	...	...
Bags—					
M	...	...	$12.50	...	...
N	...	...	12.75	...	...
WG	...	...	...	...	$13.05

Tankcars (for week ended June 10)—
K or better, $11.75; M, $11.90

Sales, USDA
650* 4‡ 31 577* 31

New York
(Per 100 lbs., c.l., Friday)
K, M, $13.50; N, $13.85; WG, $14; WW, $14.50

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	47⅞	48 1/16§	47 7/16§	49.3§	48¼
Sales	4,000¶	10,000¶	16,000¶	10,000¶	4,500¶

* Drums equivalent. ‡ Carlots. ¶ Gallons.
§ Average price.

Cyanamid Sees Future

—*Continued from page 4*

primer that Cyanamid hopes to develop soon, "Melaqua 600" appears to be a sure thing, and the company adds that it is now looking for additional applications in the paper coating and textile fields.

The product is now ready for marketing and Cyanamid's international division reports that a considerable demand is already coming from Japanese industries.

Aside from its excellent film characteristics, "Melaqua 600" is also reported to have the additional features of ease of maintenance, a higher safety factor and improved working conditions.

Paints made with this resin, says Cyanamid, are attractive to consumers because there has already been removed much of the hazard and irritation associated with conventional solvent-type formulations.

The price for "Melaqua 600" will be 45c. per pound, bulk, effective July 1.

While this price is somewhat higher than competitive material, Cyanamid points out that savings can be appreciated by industrial users in another way: lower insurance rates for fire, use-occupancy and workmen's composition. These savings results because the product being water-soluble, instead of soluble with an inflammable solvent, the producer reports.

POLYETHYLENE GLYCOLS

CARBOWAX® ALL GRADES 200 through 6,000

GLYCOLS
GLYCOL ETHERS
ALIPHATIC NAPHTHAS
POLYETHYLENE GLYCOLS
ALCOHOLS
ESTERS

AMINES
KETONES
AROMATIC SOLVENTS
SURFACE ACTIVE AGENTS
CHLORINATED SOLVENTS
PLASTICIZERS

CS
CHEMICAL SOLVENTS, INC.
60 PARK PLACE, NEWARK 2, N.J.
WOrth 2-7762 (N.Y.) Market 2-3650 (N.J.)

DETAMIDE 95

(DIETHYLTOLUAMIDE - MIN. 95% META ISOMER)

. . . the most effective insect repellent

TOLUIC ACIDS . . . m-Toluic . . . o-Toluic . . . p-Toluic

Cowles

1885 – 75th Anniversary – 1960

CHEMICAL COMPANY

7016 Euclid Avenue • Cleveland 3, Ohio

Est. 1925

SPOT — FUTURES — CONTRACTS

Ethylene Dichloride
1, 1, 2 Trichloroethane

Tankcars Drums

Attractively Priced

PHTHALIC ANHYDRIDE · MALEIC ANHYDRIDE · FUMARIC ACID

Chemical Service Corporation

88 BEAVER STREET, NEW YORK 5, N. Y.

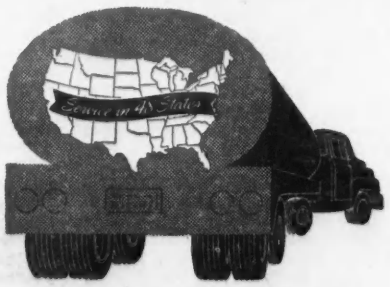
HAnover 2-6970

FIRST
IN SOLVENTS

For many years American Mineral Spirits Company has had the distinction of being the sales leader in the petroleum solvents field. This is due to the fact that AMSCO offers industry the most complete line of petroleum solvents in America. The principal reason for AMSCO leadership is that solvent users from coast to coast know they can depend on the outstanding and constant quality of AMSCO solvents.

AMSCO

Why not get the best? Just call or write the AMSCO office nearest you, or General Eastern Offices, Murray Hill, New Jersey.



AMSCO

AMERICAN MINERAL SPIRITS COMPANY

NEW YORK • CHICAGO • LOS ANGELES

IN DRUMS • IN BULK

CRESYLIC ACID & CRESOLS
by Concord

SPOT STOCKS MAINTAINED • SHIPMENTS HANDLED PROMPTLY

WRITE OR PHONE

CONCORD CHEMICAL CO., Inc.

Camden 1, New Jersey • Phone: WOodlawn 6-1526

NEED AUTHORITATIVE ANALYTICAL SERVICES?

Snell reports are prompt, accurate, reliable:

Snell has been building a reputation for quality analytical work, speedily and dependably done, for nearly forty years! We provide authoritative analyses of all types of chemicals, fats, oils, drugs, etc., plus counsel in formulation, compounding, new product development, toxicology, precautionary labeling, and many other specialties. Analytical services are available in all our three labs. When you need reports that will *stand up*, why not come to us?

FDS SNELL

Baltimore, Md. • Bainbridge, N.Y. • Worcester, Mass.

FOSTER D. SNELL, INC.

29 West 15th St., New York 11, N.Y.

"I'm saving money with Celanese Formcel Solutions! Formaldehyde in methyl, n-butyl, isobutyl or n-propyl alcohols makes for larger batch sizes... saves dehydration costs!"

Celanese® Formcel®

Celanese CHEMICALS